

HANDBOOK OF
**Alternative Theories of
Economic Development**

Edited by
Erik S. Reinert • Jayati Ghosh • Rainer Kattel



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Introduction

Erik S. Reinert, Jayati Ghosh and Rainer Kattel

There is a startling difference between the life of men in the most civilised province of Europe, and in the wildest and most barbarous districts of New India. This difference comes not from the soil, not from climate, not from race, but *from the arts*.
(Francis Bacon, *Novum Organum*, 1620)

As history has shown, some countries will do much better than others. The primary reason is that comparative advantage is not the same for all, and that some activities are more lucrative and productive than others. They require and yield greater gains in knowledge and know-how, within and without.
(David Landes, *The Wealth and Poverty of Nations*, 1998)

As will be evident from the Contents, the editors of this *Handbook of Alternative Theories of Economic Development* attempt to cover a huge canvas, in both time and geography, in order to illustrate the phenomenon of economic development from many different angles. Authors of the different chapters hail from all continents, and we believe that in order to merit the title *Alternative Theories of Economic Development* this volume, in the spirit of Nietzsche, should aim at the kind of objectivity that is best achieved by observing a phenomenon from as many angles as possible.¹ If the reader asks ‘Alternative to what?’, the reply is that this book has collected alternatives to the neoclassical economic tradition that started with David Ricardo (1817) and his theory of comparative advantage.

For centuries economics was at its very core an art, a practice and a science devoted to ‘economic development’, albeit under a variety of labels: from an idealistic promotion of ‘public happiness’ to the nationalistic creation of wealth and greatness of nations and rulers, and the winning of wars. In some sense, until about 100 years ago, most economists were ‘development economists’. In this volume we try to reflect a variety of these approaches also from the history of economic thought.

EXPLAINING AND COUNTERING BIASES

In putting together the volume we have attempted to correct for what we see as existing biases in present-day theoretical understanding of economic development. Apart from the obvious Eurocentric bias, which this volume tries to correct somewhat, the orthodox historical record that is handed down to today’s scholars has a strong bias towards an English-based understanding of economic theory, and a strong German-based understanding of the role of religion.

¹ ‘There is only a perspective seeing, only a perspective “knowing”; and the more affects we allow to speak about one thing, the more eyes, different eyes, we can use to observe one thing, the more complete will our “concept” of this thing, our “objectivity”, be’ (Nietzsche 1999 [1887]).

A massive two-volume work on economic development edited by two World Bank economists, the 1988 *Handbook of Development Economics*, devotes a chapter to the history of ideas of economic development. With the exception of Irish-born Richard Cantillon, who wrote in French, the chapter in question – written by the celebrated development economist W. Arthur Lewis (1988) – only contains references to works originally written in English by people living in the United Kingdom. It is written as if only authors who originally wrote in English, and were from England, have anything valuable to say about economic development.

When it comes to the role of religious belief and economic development, Max Weber with his thesis on Protestant ethics has acquired a similar dominance. Given that capitalist development clearly started at least 300 years before Protestantism, the dominance of the Weber thesis is peculiar. As with so many other phenomena, the context surrounding Weber's thesis helps us to a better understanding. The articles by Max Weber (1864–1920) on Protestantism (1904–1905) appear as part of an academic feud with his friend, colleague and academic rival Werner Sombart (1863–1941), who in his monumental work on capitalism two years earlier (Sombart 1902) had emphasized the role of Catholics and Jews in the development of capitalism. Of what was once a flourishing academic debate between Max Weber and Werner Sombart on the role of religion in economic development, one side of the argument – Weber's – stands as the sole survivor.

Charting the history of the ideas of economic development with Adam Smith's 1776 work and continuing solely with works originally written in English produces a very strong bias. Adam Smith writes some 500 years into the life of capitalism, when what already could be called a second industrial revolution² was in full swing. If the historiography of the European literary canon had been allowed to develop along the same linguistic lines as the historiography of the standard canon of economics, today's students of literature would have been left with a cult of Shakespeare alone, while Dante, Cervantes, Voltaire, Goethe, Dostoyevsky and Ibsen would have been left in complete oblivion. Ongoing research by Kenneth Carpenter and Erik Reinert shows that of the 62 economics books which reached more than ten editions before 1850, only 18 were written by people from the United Kingdom, three by Americans, and the balance of 41 were first published in languages other than English. In other words, only 29 per cent of the best-selling economics books – those receiving 100 per cent of the attention in the World Bank version of the history of economic thought on development – were economists from the United Kingdom writing in English. This shows how utterly unbalanced the World Bank story, and the generally accepted wisdom of development economics, actually is. Among the first ten bestselling books on economics (Box 0.1), English scores a bit higher, with four out of ten books, then follow two books each in Italian and German, and one each in Dutch and French.

A fundamental problem in today's economic theory is the historically unfounded idea that the profession owes its origins to Francois Quesnay and the eighteenth-century French Physiocrats. The fact is that the Physiocrats lost all battles in history, except the one in the economics textbooks. The total failure of Physiocratic economic policy was

² It may be argued that a first industrial revolution took place in Europe, starting in the Italian city-states around 1200 and reaching England in the late 1400s, based on the production of woollen textiles. In terms of Kondratiev long waves, this would be 'Kondratiev 0'.

BOX 0.1 THE TEN EARLIEST BESTSELLING ECONOMICS BOOKS (BOOKS ACHIEVING MORE THAN TEN EDITIONS BEFORE 1850)

- 1588. Giovanni Botero, *Cause della Grandezza delle Città* (On the Greatnesse of Cities). Rome. Translations into Spanish, French, Latin (in Germany), English and German.
- 1621. Thomas Culpepper, *A Tract against Usury*. London. Translations into French, Swedish and Russian.
- 1638. Bernardo Davanzati, *Scisma d'Inghilterra con altre operette del sig. Bernardo Davanzati*. Florence. Part translation into English as *A Discourse upon Coins*.
- 1656. Veit von Seckendorff, *Teutscher Fürstenstaat* (The German Princely State). Frankfurt. German only, but stayed in print for 100 years.
- 1662. Pieter de la Court, *Interest van Holland*. Amsterdam. Translated into German, English and French.
- 1664. Thomas Mun, *England's treasure by forraign trade*. London. Translated into French, Swedish and Italian.
- 1668. Josiah Child, *Brief observations concerning trade, and interest of money*. London. Translations into French and Swedish (part translation).
- 1673. William Temple, *Observations upon the United Provinces of the Netherlands*. London. Translations into Dutch, French, German and Italian.
- 1684. Philipp Wilhelm von Hörnigk, *Österreich über alles wann es nur will* (Austria Supreme, If It So Wishes). No place, but Nürnberg. German only, but stayed in print for 100 years.
- 1695. Pierre de Boisguilbert, *Le detail de la France* (A Report of France). Rouen. No translations, but a plethora of editions in French over the next 20 years, also published in French in Holland, Belgium and Germany.

Notes:

Translation languages are listed in order of publication.

In spite of some of the titles, these books all broadly relate to economic development. Culpepper sees an explanation of the economic success of Holland in the low interest rates. Davanzati's essays are varied, not only on coinage, which is the part translated into English.

Worth noting is the short-lived success of some authors, such as Boisguilbert; and the exceptionally long shelf-lives of Botero, Seckendorff, Mun and Hörnigk, whose books all stayed continuously in print for a century or more.

Source: Carpenter, Kenneth (1975), *Economics Bestsellers before 1850 + later additions by Reinert and Carpenter*.

a main cause of the shortage of bread in Paris, and thus also of the French Revolution (Kaplan 2015 [1976]). The arrogance, insularity and fanaticism of the Physiocrats created a strong reaction from other economists who, in the end, clearly won the intellectual battle. The most influential German economist at the time wrote a book with the telling title *Der Antiphiysiokrat* (Pfeiffer 1780). To another of their great critics, Ferdinando Galiani, Quesnay was no less than 'the Antichrist' (Galiani 1818). Galiani – as opposed to Quesnay – did produce an economic bestseller (Galiani 1770). The standard history of economic thought, tending to start with the Physiocrats as the Adam and Eve of the situation, produces a totally distorted picture and creates an unstable and unhealthy foundation for the whole science.

One of the goals of this volume is to attempt to correct these existing imbalances: the Eurocentric imbalance geographically, the Anglocentric one in development, the Protestant-centred one in religion, and the Physiocracy-based family tree of economics.

ECONOMICS: CONTINUITY IN CYCLICALITY

Apparently there is continuity in economic thought. Historian Raymond de Roover has emphasized this continuity: ‘Despite many currents and cross-currents, continuity is perhaps the most impressive phenomenon in the history of economic doctrines’ (de Roover 1955, 161–190). However, this continuity does not manifest itself in smooth and cumulative accumulation of knowledge, as in a Whig conception of history (Butterfield 1931), where every old idea in economics can be classified as being either heresy or a sound precursor of neoclassical economics, but rather in the recurrence of similar ideas in similar contexts. So there are no paradigm shifts in the Kuhnian sense, but rather parallel streams, often at different levels of abstraction, which over the long term give the mainstream a cyclical aspect as if science were ruled by fashion.³ As Kenneth Arrow says about the phenomenon of increasing returns to scale: ‘this tradition acts like an underground river, springing to the surface only every few decades’.⁴

In economics we can observe how new elements come into focus, but then disappear into the intellectual periphery – sometimes because the problems have been solved – only to be brought back again, often under a new heading, when similar contexts reoccur. Today, with the publication of Thomas Piketty’s (2014) *Capital in the 21st Century*, we find the problem which was once intensely debated under the heading ‘social justice’ resurfacing again under the heading of ‘inequality’, since income distribution in many countries today is similar to the pattern in capitalist countries before the 1929 crisis, but – tellingly for the changing nature of economics – the present discussion is no longer mainly framed in the context of an analysis of society (social justice)⁵ but as a comparison between individuals (inequality).

A main variable in the cyclical pattern of economics is the level of abstraction. When things go well in the core economies of the world, where economic theory is generally produced, economics tends to become very abstract and, essentially as a direct result of this high level of abstraction, the role of policy is minimized. After England for hundreds of years had protected its national industries, free trade was clearly in the country’s interest. Only once did Smith use the term ‘invisible hand’ in the *Wealth of Nations*: when it sustained the key import substitution goal of mercantilist policies, when the consumer preferred domestic industry to foreign industry (Smith 1976 [1776], 477). This is when ‘the market’ had taken over the role previously played by protective measures.

³ A very valuable history of economic thought which treats one such long cycle is the three volumes of Edwin Seligman’s *Main Currents in Modern Economics* (1971 [1962]). Starting with the reaction against English classical economists, the first volume is entitled *The Revolt against Formalism*, (starting with ‘Protests from the Historicists’), the second *The Reaffirmation of Tradition* (starting with ‘From Marginalism to Libertarianism’), and the third is entitled *The Thrust towards Technique*. It is difficult not to agree with John Kenneth Galbraith’s (1971, vii) Preface calling Seligman’s volume ‘the most overlooked book of the last ten or twenty or fifty years’. We are convinced that a new such cycle of economic fashion – of revolt against formalism – is starting again, and that Seligman’s volume is invaluable to anyone wishing to fully apprehend this development in its historical context.

⁴ Foreword to Arthur (1994, ix). For a similar treatment of the ‘cyclicity’ of the appearance of increasing returns, see Buchanan and Yoon (1994).

⁵ In a standard series of United States (US) history, A History of American Life, mainstream publisher Macmillan issued as its Volume XI, *The Quest for Social Justice: 1898–1914*, by Harold Underwood Faulkner (1931). These are the parts of US history which tend to disappear in an ideological reinterpretation of history.

David Ricardo (1817) produced a theory at a very high level of abstraction: he modelled international trade as the barter of qualitatively identical labour hours. Anyone accepting this high level of abstraction – that all labour hours are qualitatively alike – buys into the theory of comparative advantage. History shows, however, that none of the nations following England's path to industrialization bought into Ricardo's theory until they themselves had become industrialized. As an example of the swings of fashion, having lost its industrial supremacy (around 1900), England itself recanted on Ricardian trade theory (Dangerfield 1961 [1935]). At present it is interesting to observe a similar transition as that of England around 1900, from free trade to more protection, in the internal politics of the United States (US). Here, in an unexpected coalition, Democrats to the left ('liberals') worried about falling US wages may find otherwise unlikely allies in nationalist Republicans to the far right worried about national power.

One economist who worried about the swings of fashion in economics was Friedrich von Hayek (1899–1992). In his speech after receiving the National Bank of Sweden's 1974 Nobel Prize in economics – shared with development economist Gunnar Myrdal – Hayek said: 'if I had been consulted whether to establish a Nobel Prize in economics, I should have decidedly advised against it. One reason was that I feared that such a prize . . . would tend to accentuate the swings of scientific fashion.'⁶ Hayek's point about the swings in economic fashion is emphasized by the fact that he commented on the Nobel committee 'awarding the prize to one whose views are as unfashionable as mine are'. Today Hayek's theories of course have become extremely fashionable. Nowhere has the swing in economic fashion been as tangible as when comparing John Maynard Keynes' role of 'saviour' of the world economy after the Great Depression with his position in the policies applied by the European Union at the time of publication of this volume: Keynes' emphasis on the importance of keeping up demand has been substituted by an austerity policy decreasing demand.⁷

Chicago economist Jacob Viner (1892–1970), who inspired Hayek, was also worried about the fashions of economics, dedicating an article, "'Fashion" in Economic Thought', to the issue.⁸ Viner also wrote a most interesting book on the problem of economic man as a passive being in the hands of Providence; of the invisible hand being a metaphor for Providence, thus bringing laissez-faire and 'passivity as strategy' close to a primitive belief in faith and providence (Viner 1972). This warning, echoing the concerns of Thorstein Veblen, is surprising from someone who is considered a Chicago economist, and shows – as we shall return to below – that the early proponents of very abstract theories also warned against the irrelevance of such abstract theories.

During the process of formalization of economics into neoclassical economics in the post-World War II (WWII) period, development economics slowly disappeared from the economic mainstream. 'Where are their models?' was one famous battle cry. Jacob Viner made a key contribution to the demise of development economics by removing a

⁶ Friedrich August von Hayek's speech at the Nobel Banquet in Stockholm, 10 December 1974.

⁷ 'Keynes never existed. The General Theory of Employment, Interest and Money was never written. Economic history ended on the day Franklin Roosevelt replaced Herbert Hoover as president of the United States', Larry Elliot, *Guardian*, 13 July 2015. Available at http://www.theguardian.com/world/2015/jul/13/europe-greece-pushed-into-further-peril?CMP=share_btn_fb (accessed 1 October 2015).

⁸ Reproduced in Viner (1991, 189–197).

fundamental force of uneven development – increasing returns – from international trade theory, on the account that it was not compatible with equilibrium (Viner 1937, 475–482). What would have been more logical would have been to remove equilibrium from economic theory because it is not compatible with an analysis of the real world. Economists' choice of tools came to trump their interest in reality. Equilibrium became virtually the only game in town.

Thus economics developed into what we could call a tool-driven profession: the kind of information the tools could handle came to determine the development of the profession. Paul Krugman conveyed the dilemma that this causes very well in an interview with the *New Yorker*: 'I think there's a pretty good case to be made that the stuff that I stressed in the models is a less important story than the things that I left out because I couldn't model them'.⁹

We are facing a very serious situation here. Modern economists, like Krugman, are aware of the dilemma caused by the restrictive assumptions and high level of abstraction imposed by the prescribed models. But the tools of the profession do not allow them to move into more relevant theories, and this obviously has very serious consequences. One of the aims of this work is to resurrect a methodology of economics which is not bound by the restrictive tools chosen by today's profession, a tradition we have called the 'Other Canon' of economics (Reinert and Daastøl 2004).

Also, the fathers of mainstream methodology and its accompanying ideology, neoclassical economics – which led to the marginalization and virtual disappearance of classical development economics – people like Hayek and Viner, were already aware of and even warned against this tendency. Economists who sacrificed the real world in order to keep the 'purity' of the model sometimes also warned against what they themselves were doing and inspired others to do. The same Viner who threw out increasing returns from economic theory, years later complains that 'economists have succeeded in being as ahistorical as an educated man can perhaps possibly be' (Viner 1991). In 1957 Viner already criticizes the irrelevance of economics by telling a story from a zoo, where a lady, fascinated by the hippopotamus, asked the zookeeper if the animal in question was a male or a female. She receives the following reply: 'Lady, I should think that that would be a question that would be of interest only to another hippopotamus.' Says Viner: 'The same question, I fear, speaking from inside the profession, can be said of a good deal of modern economic theorizing.'¹⁰ Or, as Paul Samuelson (1962) once approvingly put it, 'In the long run the economic scholar works for the only coin worth having – our own applause'. A profession with such attitudes – particularly after a few decades of economic progress after WWII (which their theories did not produce) – became a rather incestuous sect. What we ask in this volume is also, '*Cui bono?*': in whose interest was it that key aspects of real-world economics, such as increasing and diminishing returns, have never reached the economic policy level over the last decades? It was definitely not in the interest of developing countries.

We would like to point to the dualism that was so typical of economists both of the Austrian (Hayek) and neoclassical (Viner) schools before World War II: the real world

⁹ *New Yorker*, 1 March 2010. Available at <http://www.newyorker.com/magazine/2010/03/01/the-deflationist> (accessed 1 October 2015).

¹⁰ Reproduced in Viner (1991, 193).

was kept as a frame of reference that was to be continuously confronted, in the spirit of Karl Menger, with the theoretical map of ‘the forces at work’. With time, the role of reality as a frame of reference lost ground, and, paradoxically, some of the economists who gave us today’s mainstream economics issued clear warnings against the theories they themselves were promoting, warnings that were increasingly not heard. As Paul Krugman succinctly put it: economics came to ‘follow the line of least mathematical resistance’ (Krugman 1991, 6).

ECONOMIC THEORY AND ASSUMPTION-BASED RENT-SEEKING

In economics, particularly in the public choice school, rent-seeking is a detested activity. Rent-seeking involves seeking to increase one’s share of existing wealth without creating new wealth. Such rent-seeking is supposed to result in reduced economic efficiency, reduced wealth creation, lost government revenue and increased income inequality (see, e.g., Krueger 1974). Some of the approaches in this volume lead to seeing rent-seeking from a completely new angle. If the history of economic development shows us that high levels of development, without exception, have been the result of an agglomeration of increasing-returns activities (manufacturing); if, in other words, development is not at all a result of perfect competition, but rather a result of dynamic imperfect competition; the term ‘Ricardian rent’ acquires a totally new meaning. ‘Ricardian manufacturing rent’ becomes the rent – in terms of higher profits and higher wages and higher levels of development – collected by wealthy countries that have managed to enforce Ricardo’s law of comparative advantage on poor countries by preventing them from industrializing. Colonialism – the economic essence of which was to prohibit manufacturing activities in the colonies – becomes an extremely successful case of ‘Ricardian manufacturing rent-seeking’ used by colonial powers. Poverty and underdevelopment are the other side of this Ricardian rent-seeking coin. It is worth noticing that former World Bank Chief Economist, Justin Yifu Lin, also supports the view that manufacturing is essential for economic development: ‘Except for a few oil-exporting countries, no countries have ever gotten rich without industrialization first’ (Lin 2012, 350).

These assumption-based rents that accrue to advanced economies result from the structure of modern economics. Neoclassical economics is based on a set of assumptions that were needed in order to use mathematical tools chosen by the profession: perfect competition, perfect information, full divisibility of resources, and so on. But even more fundamental is that this set of assumptions – applied equally across the enormous variety of economic activities – implies that economic activities are qualitatively alike.¹¹ This is what Nobel laureate James Buchanan referred to as the ‘equality assumption’: ‘Any generalized prediction in social science implies at its basis a theoretical model that embodies elements of an equality assumption’ (Buchanan 1979, 231). In reality the shoe-shine business of a 12-year-old in a Lima slum differs significantly from that of Bill Gates in terms of producing economic development. By not being able to factor in these qualitative

¹¹ For a discussion of this, see Reinert (2009).

differences – which David Ricardo also failed to do when he modelled international trade as bartering qualitatively equal labour hours – neoclassical economic theory fails to understand why economic development is so uneven. Models to the contrary are produced, but they systematically fail to reach the international policy level.

Another assumption that enables the collection of huge rents – in this case financial rents – originates in the failure of modern economics to distinguish, as clearly as was once done, the real economy from the financial economy. In the 1930s, across the political spectrum, it was understood that the financial sector had to be tightly controlled; from communism via Roosevelt's New Deal to fascism. The fact that neoclassical economics, as another inheritance from David Ricardo, fails to distinguish between the productive sector and the financial sector has, on the one hand, allowed an enormous degree of unproductive financial investment to crowd out investments in the real sector; and on the other hand, has produced a sequence of financial crises.¹² Highly abstract theories ignore qualitative differences that, in real life, are crucial in understanding economic growth and its absence.

In a world of diversity and heterogeneity, understanding economic development forces choices upon researchers. Between a position where all human beings are alike as economic agents ('perfect information') and dealing with 6 billion unique individuals, finding an appropriate level of abstraction for analysis is not obvious. As we see it, the only way to solve this problem is to follow the suggestions of the young Joseph Schumpeter in a book commenting on the *Methodenstreit* of German economics (Schumpeter 1908). Economic theory exists on various levels, from very abstract to very concrete and detailed, and one should first ask a question and then enter into the theoretical edifice at a level of abstraction where one is likely to find an answer. If we want to know why Microsoft's profits are higher than those of businesses shining shoes, the answer lies in industrial economics and its understanding of barriers to entry, technological change, and oligopoly power resulting from dynamic imperfect competition. It is our assertion that the same applies to development economics: Ricardo's trade theory and neoclassical economics operate at a level of abstraction which is too high to grasp the relevant variables. The policy conclusions of Ricardo's trade theory and of standard neoclassical economics are, in both cases, built into the assumptions. The inability to understand differences in outcomes is a direct result of the lack of differences in the models: 'equality and harmony' built into the models produce 'equality and harmony' in results through the same mechanisms that produce 'garbage in, garbage out'. The difference is that the irrelevant policy conclusions that emerge are actually in somebody's interest: considerable economic rents may be collected based on irrelevant assumptions that keep poor countries poor.

One factor that may explain the success of irrelevant models is their apparent short-term success in the West. An insight from a 1952 book by Hayek explains this mechanism: 'Never will man penetrate deeper into error than when he is continuing on a road which has led him to great success'. In other words, when being 'right' and successful, mankind will 'overshoot' into error. The financial crisis and the persistent problems of poverty both testify to this 'overshooting' in levels of abstraction.

¹² A discussion and a bibliography of the relationship between the production economy and the financial economy are found in Reinert and Daastøl (2011 [1998]).

The economics profession – and development economics in particular – is faced with a trade-off between relevance and accuracy. As Schumpeter once put it in his foreword to a book on monopolies: ‘The general reader will have to make up his mind, whether he wants *simple* answers to his questions or *useful* ones – in this as in other economic matters he cannot have both’ (Zeuthen 1930, x).

Other economists have contributed to our understanding of the importance of being aware of the different levels of abstraction found in economic theory. Norwegian-American economist Thorstein Veblen (1857–1929) suggests that knowledge exists on two different levels. Highly abstract and esoteric knowledge, like that of high priests, carries much prestige, but in practice is often fairly useless. On the other hand there is exoteric knowledge – useful knowledge – based on facts and experience, which carries little prestige. Veblen was worried that neoclassical economics would contaminate the commonsense instincts of economics. Using Veblen’s terminology, we can argue that Hayek’s overshooting of scientific fashion corresponds to Veblen’s idea that irrelevant education may contaminate healthy instincts of useful and exoteric knowledge (Veblen 1914).

Canadian economist Harold Innis (1894–1952) suggests that scientific fashions of what Veblen called esoteric and exoteric knowledge follow a pattern, and in his scheme it becomes clear that scientific fashions may be driven by what Veblen dubbed ‘vested interests’. We shall argue that sectors of the economies may actually be collecting rents from irrelevant economic theories. Without reference to Veblen, Innis sees that abstract science, communicated in Latin, gets more and more abstract, monopolizes knowledge and enters into alliances with the political elites (with Veblen’s vested interests) (Innis 1951). Today’s Latin would be mathematics, and today a *de facto* alliance exists between mainstream (neoclassical) economics and the financial sector. One aim of this volume is, in the spirit of Innis, to break the present alliance between extremely abstract – and largely irrelevant – economic theories and the political elites. These theories are largely irrelevant as reflections of the real world, but useful for assumption-based rent-seeking by the presently industrialized countries and for the financial sector.

A fascinating aspect of Innis’ vision of the cyclicity of science is that he sees Western Civilization again and again being saved by knowledge that for a time only survives in the periphery, by near-defunct theoretical paradigms. To take an example from today’s financial crisis: US economist Hyman Minsky (1919–1996) was for a long time a lonely voice when he claimed that ‘it’ – a severe financial crisis – could happen again. However, at a recent Minsky conference held in New York, economists Joseph Stiglitz and Paul Krugman and the main regulators from both the United States and Europe were present, attempting to learn from Minsky’s insights. As Innis would have predicted, Minsky’s economics had survived only in the academic periphery: at the University of Missouri–Kansas City, and at the Levy Institute at Bard College in New York State.

CHOOSING ONE’S PREFERRED FORM OF IGNORANCE

One way of looking at the history of economics as it relates to economic development, then, is to see it as sequences of theories pitched at different levels of abstraction. One overwhelming example of this is David Ricardo, who in his 1817 *Principles of Political*

Economy constructed a theory of international trade based on the bartering of qualitatively identical units of labour hours. Ignoring the qualitative differences in the economic world – imposing Buchanan’s ‘equality assumption’ – leads to ignorance of the results of these differences.

But ignorance may take different forms. The most constructive form of ignorance is what German philosopher Nicolas of Cusa (1401–1464) called ‘*docta ignorantia*’, the learned ignorance which implies an attempt to define what you do not understand; that is, knowing what you do not know and, implicitly, searching for a better understanding. In a 1993 article, Stanford economist Moses Abramovitz invoked a different and more insidious type of ignorance expressed by Mark Twain: ‘It ain’t what you don’t know that gets you into trouble. It’s what you know for sure that just ain’t so’ (Abramovitz 1993; Twain 1884). This was Abramovitz’s very wise conclusion after two late 1950s studies attempting to explain economic growth by measuring inputs of labour and capital. Abramovitz was first out with a paper in 1956. The year after, in 1957, Robert Solow published a paper called ‘Technological Change and the Aggregate Production Function’, comparing a model based on the standard aggregate production function to the actual figures in the US economy. His surprising result was that only 12.5 per cent of economic growth in the period studied can be attributed to the increase of labour and capital. A ‘residual’ of 87.5 per cent of overall growth has to be explained by some other factor. This is what made Abramovitz conclude – with Mark Twain – that:

the old primitive Residual is really an understatement, a lower-bound measure of our ignorance about the sources of growth. . . . Perhaps some of you are thinking ‘If we are already ignorant of 90 per cent of the sources of per capita growth, how much worse can it be? Can it be worse than 100 per cent?’ In a sense, it can . . . ‘It ain’t what we don’t know that bothers me so much; it’s all the things we do know that ain’t so.’ That is really the nub of the matter. (Abramowitz 1993)

In his 1957 article, Solow attempted to solve the problem by adding ‘technical change’ as a third factor. But this category did not solve much. Since technical change is so unevenly distributed between economic activities, in a system with imperfect competition countries with many advanced-technology activities would be able to keep a lot of the resulting rent to themselves. A key difference between mainstream Ricardian economics and most of the alternative traditions mentioned here is that the non-Ricardian traditions, from Giovanni Botero in the 1590s to Latin American structuralism in the 1970s – the alternative Other Canon traditions – see economic development as activity-specific, that there is much more ‘residual’ in some economic activities than in others. Abramovitz agreed to the activity-specific nature of the residual, and pointed to this almost being a pre-WWII US mainstream position. In a 1996 letter to Reinert, Abramovitz wrote: ‘I agree in particular that the “residual” and growth in general are industry-specific. That has seemed clear to me since I was a graduate student in the Thirties and read the Kuznets and Burns¹³ books’ (pers. comm., 16 August 1996).

The 1620 quote from Francis Bacon and the 1998 quote from David Landes at the

¹³ Simon Kuznets (1901–1985), Harvard economist and recipient of the 1971 Nobel Memorial Prize in Economics; Arthur F. Burns (1904–1987), Chairman of the Federal Reserve 1970–1978, under Presidents Nixon, Ford and Carter.

head of this chapter are statements to the same effect from two different angles: societies are shaped by their choice of economic activities. Pastoral activities, be they in the high Andes or reindeer herding in Northern Fennoscandia, show surprisingly similar social organizations; as do modern industrial societies, be they in Singapore or Amsterdam. Similar activities make societies become isomorphic across geography and culture. We would argue that the same phenomenon applies to religion: sharing the same type of economic activities creates much more harmonious relationships between Muslims and Western culture than what we find between Muslims in pre-industrial societies and the same Western culture. It is tempting to quote Italian economist Ferdinando Galiani (1728–1787): ‘From manufacturing you may expect the two greatest ills of humanity, superstition and slavery, to be healed’ (Galiani 1770, 121).

At the moment the West seems to be seeing a dramatic example of the relationship between economic structure and society in general. If the middle class, as is generally assumed, created the broad base needed for democracy,¹⁴ it was industrialization that created the middle class. To what extent the loss of manufacturing, and of the labour unions associated with manufacturing, is leading to the loss of the middle class, as seems to be evident in the United States, will be further discussed in the Epilogue to this book (Chapter 40).

The gradual loss of economic history and a widely based history of economic thought is that the Mark Twain type of ignorance – ‘knowing’ what is not true – is a growing problem for our understanding of wealth and poverty. We have the deepest respect for *Financial Times* commentator Martin Wolf as probably the best economics journalist anywhere, but even he falls into the Mark Twain ignorance trap. Within an otherwise brilliant essay, Wolf lays bare an ignorance of the worst kind: ‘The first world war also destroyed the foundations of the 19th century economy: free trade and the gold standard’ (Wolf 2014). It may be commonly believed, but if there is something the nineteenth-century world – with exception of England – was not, it was committed to free trade.¹⁵ In fact, all countries that followed England into industrialization followed England’s own formula over centuries: emulation and protection before free trade. The same general misunderstanding applies to our understanding of *laissez-faire*. As a perceptive American business historian concluded after studying the nineteenth-century US economy: ‘King Laissez Faire was not only dead; the hallowed report of his reign had all been a mistake.’¹⁶

A main goal of this book is to eradicate, as far as possible, the destructive ignorance as defined by Mark Twain – ‘knowing’ what is actually not true – and to replace it by true scientific intellectual curiosity, expressed by Cusanus as *docta ignorantia*. Or, to put it with Danish poet and scientist Piet Hein (1905–1996), ‘Knowing what Thou knowest not, is in a sense Omniscience’. It seems to us that formal models too often lead to the former kind of ignorance, while delving into actual economic historical context leads to the latter kind. If one asks why Europe, from Cusa’s time to about 1700, experienced a phenomenal cultural and economic development that enabled the continent to overtake Asia and China as the economic centre of the world, it was precisely because of the

¹⁴ India may perhaps be listed as an exception here.

¹⁵ Trade increased, but that did not mean it was ‘free’, unless one uses the now defunct definition that free trade means the absence of trade prohibition rather than the absence of tariffs.

¹⁶ Quoted in McCraw (1997, 316).

attitude of Cusa and his contemporaries of civic humanism flourishing in a diversity of European political and social contexts.¹⁷

PROBLEM: LACK OF DIVERSITY WITH THEORETICAL AND GEOGRAPHICAL BIASES

We have previously referred to the ongoing research by Carpenter and Reinert showing that the perceived bias of English language historical dominance in economics is problematic. Different schools of economics inhabited and dominated diverse economic areas, reflecting the differences or similarity in contexts. Emulation between nations in similar situations was the name of the game.¹⁸ Nineteenth-century US economists understood that the United States, extremely protectionist at the time, in the end would declare free trade:

when the United States has a hundred million people¹⁹ and the seas are covered with her ships; when American industry attains the greatest perfection, and New York is the greatest commercial emporium and Philadelphia the greatest manufacturing city in the world; and when no earthly power can longer resist the American Stars, then our children's children will proclaim freedom of trade throughout the world, by land and sea. (Dorfman 1947, 581)

That diversified and independent schools of economic thought, as here exemplified by the United States, could target policy recommendations to the specific situation of a nation was crucial for all the nations following the United Kingdom in industrialization. However, if we look at today's top economists in the global economic discourse, we find a worrying lack of diversity in geography and language. The linguistic dominance which Anglo-Saxon economists wrongly attribute to the past is very real today.

Google Scholar offers an easy way to check the top ten most-cited economists, albeit with some caveats. First, Google Scholar ranks only scholars with a Google profile (which is very easy to create, but not everybody does so; also some economists who are not alive have Google Scholar profiles created for them); secondly, not all economists have 'economics' or derivatives listed in either their job title or keywords. Thus, for example Richard Nelson, one of the authors in this volume, would not appear when we search for 'economics' in Google Scholar, although by his citations he would easily make top ten and it is impossible to claim that he is not an economist. On the other hand, Google Scholar does not discriminate between languages: bestsellers in any language will show up. With these caveats in mind, Google Scholar top ten economists according to citations²⁰ are:

- Andrei Shleifer, 182 602 citations, Harvard.
- Oliver Williamson, 165 496 citations, Berkeley.
- Paul Krugman, 142 803 citations, Princeton.

¹⁷ For the role of lack of diversity in economic decline, see Reinert and Xu (2013).

¹⁸ For a discussion of this, see S. Reinert (2011).

¹⁹ This happened around 1915.

²⁰ As of January 2015.

- Kenneth Arrow, 134 863 citations, Stanford.
- Robert Barro, 110 387 citations, Harvard.
- James Heckman, 109 054 citations, Chicago.
- Lawrence Summers, 87 601 citations, Harvard.
- Douglass North, 84 961 citations, Washington.
- Jean Tirole, 81 605 citations, Toulouse.
- William Greene, 71 771 citations, New York.

With the exception of Jean Tirole, a Frenchman, the top ten economists by citations are affiliated with a handful of US schools. This confirms the national and linguistic bias previously referred to, but the Google list indicates that under globalization things seem to have got worse: literature based on the contexts of specific countries seems to have been crowded out by global leaders, most of them writing in the mainstream tradition and based at US universities. This tradition essentially represents just one way of looking at economics and economic development, and its origin in the economics of David Ricardo is a common denominator. The United States followed the strategy of which Friedrich List (1789–1846) accused the English: after having achieved wealth by protecting their own industries, they would in effect prohibit other nations from following their same strategy (List 1841, 501).

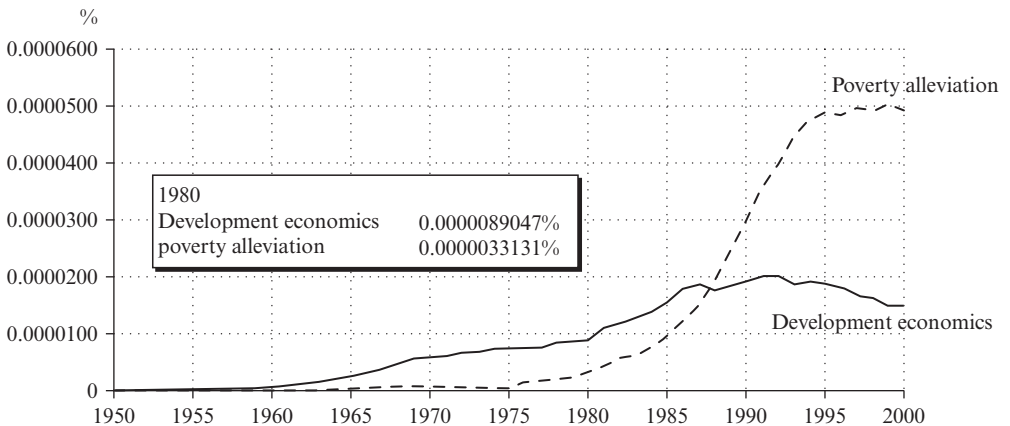
What is worrying is that the triumphalism that followed the 1989 fall of the Berlin Wall and the end of the Cold War in fact seems to have narrowed even more the horizon of mainstream economics, at least as it applies to economic policy. Arthur F. Burns, head of the US Federal Reserve from 1970 to 1978, had the courage to appeal to Karl Marx and Thorstein Veblen when he sought to explain uneven economic development: ‘The warnings of a Marx, a Veblen, or a Mitchell that economists were neglecting changes in the world gathering around them, that preoccupations with states of equilibrium led to tragic neglect of principles of cumulative change, went unheeded’ (Burns 1954, 46).

This book sets out to revive and explore the alternatives: theories and approaches that over a long period of time have existed as alternative courses of policies and actions to those emanating from today’s mainstream and neoclassical theories, theories much older and better tested than those based on the economics of David Ricardo and on the idea of equilibrium. Our selection is problem-driven rather than driven by the available tools, it is based on what Richard Nelson and Sidney Winter call ‘appreciative economics’,²¹ and also based on a variety of methods.

FROM DEVELOPMENT ECONOMICS TO POVERTY ALLEVIATION

After World War II, the economic success of the Marshall Plan and the policy options of the 1948 Havana Charter (formally The Final Act of the United Nations Conference on Trade and Employment) opened up a perspective where all nations could industrialize and become wealthy. However the Havana Charter was watered down to GATT, and

²¹ Nelson and Winter (1982); see page 46 for a discussion of ‘formal’ versus ‘appreciative’ theories.



Source: Google.

Figure 0.1 Ngram for 'development economics' and 'poverty alleviation', 1950–2000

initially very positive developments in the world periphery slowly gave way to often premature free trade, and to UN 'development decades' which in Latin America gradually came to be perceived as 'lost decades'.

The year 1989 did not only bring the fall of the Berlin Wall, it also brought the birth of the Washington Consensus, recanting on the principles that had been established in the immediate post-WWII period. Now, at a distance of more than 25 years, it is reasonably clear that the two events – the fall of The Berlin Wall and the Washington Consensus – are ideologically closely connected. It should also be noted that the Maastricht Criteria of the European Union and the ideology surrounding the euro – which at the time of writing in 2016 are creating havoc in the European Union periphery – are also a brain-child of the period 1989 to 1991.

The perceived failure of the last development decades prompted the United Nations to a strategic shift, with the Millennium Development Goals focus shifted from economic development to 'poverty alleviation', that is, from eradication of poverty by increasing the personal income of individuals to alleviating the symptoms of poverty. The worrying aspect of today's globalization strategy is that it does not rest on any of the successful strategies of the past. It promises free trade and palliative measures against the poverty that results from premature free trade, measures that are both an insult to the dignity of the world's poor and, in the long run, an expensive system of welfare colonialism.²² The Google ngram in Figure 0.1 illustrates the shift in emphasis away from development towards poverty alleviation.

This shift in emphasis, and the associated decline of development economics, reflected the perception which had become increasingly widespread within the mainstream economics profession: that all answers to basic economic queries for all types of countries –

²² For a discussion of welfare colonialism, see Reinert (2006b) and Ocampo et al. (2007, 192–221). For the origin of the term 'welfare colonialism', see Paine (1977).

developed, developing and underdeveloped – could come from the same neoclassical analytical framework which privileged the market mechanism. The associated focus on poverty alleviation involves a much sharper focus on the micro, on the miniature as a supposedly useful and relevant representation of the larger reality. It is very much a product of the intellectual ethos prevailing in the academic centres of the North; almost all of the practitioners, whatever their country of origin, actually live and work in these places. Therefore it is a reflection of a deep internalization of the basic axioms of mainstream North Atlantic economic thinking, especially in terms of the dominance of the neoliberal marketist paradigm.

Some underlying principles of this approach are worth noting, all the more because they are rarely explicitly stated. This approach remains firmly entrenched in the methodological individualism that characterizes all mainstream economics today. The models tend to be based on the notion that prices and quantities are simultaneously determined through the market mechanism, with relative prices being the crucial factors determining resource allocation as well as the level and composition of output. This holds whether the focus of attention is the pattern of shareholding tenancy or semi-formal rural credit markets or a developing economy engaging in international trade.

This literature also posits a basic symmetry not only between supply and demand, but also between ‘factors of production’. Thus, the returns to ‘factors’ – land, labour, capital – are seen as determined along the same lines as the prices of commodities, through simple interaction of demand and supply. Where institutional determinants are acknowledged, they are seen as unwelcome messing about with market functioning, and ‘government failures’ tend to be given wide publicity. An implicit underlying assumption in much of the literature remains that of full employment, or at the very most underemployment rather than open unemployment. Further, while externalities are recognized, they are sought to be incorporated into more tractable models, thereby reducing the complexity of their effects. Similarly, while market failures are admitted, the policy interventions proposed or discussed are typically partial equilibrium attempts to insert incentives or disincentives into the market mechanism, with the objective of promoting ‘efficiency’. And even the basic fact of uneven development tends to be translated into models of ‘dualism’, which in turn also implies less attention to the differentiation internal to sectors, and the patterns of interaction of different groups or classes within and across sectors. Even when there is acceptance that ‘history matters’, this is typically reduced to certain simple and modellable statements. Thus, a standard way in the literature of dealing with the effects of history is in the form of complementarities, along the lines made famous by the example of the QWERTY typing keyboard. Other common ways of incorporating history are through inserting ‘social norms’ as a variable, or analysing the effects of the ‘status quo’ in creating inertia with respect to policy changes.

As a result, particular micro features of developing economies tend to be seen as ‘exotica’ in terms of prevalent economic institutions in developing countries, and are then sought to be explained along the lines of methodological individualism, albeit with some cultural nuances. This can be described as a ‘*National Geographic*’ view of the broader process of development, whereby snapshots of particular institutions or economic activities are taken, the difference from the ‘norm’ of developed capitalism is highlighted and then these are sought to be explained using the same basic analytical tools developed for the norm. The means whereby these economies or institutions can then become

less different, or more like the developed-market ideal (which of course does not exist in reality either), then becomes the focus of the policy proposals emanating from such analyses.

As a result, those who in earlier periods would have been studying development as structural transformation now focus on poverty alleviation. This idea reached its apotheosis in the Millennium Development Goals, and their newly anointed successor, the Sustainable Development Goals, which effectively are directed towards ameliorating the conditions of those defined as poor, rather than transforming the economies in which they live. Even here, the focus is on specific interventions – micro solutions that are seen to work in particular cases – and considering how they can be modified and scaled up. So the global development industry has kept searching for those magic silver bullets for poverty alleviation. Over the past decades these have included successively: freeing markets and getting rid of government controls; recognizing the property rights to informal settlements of slum dwellers; microfinance; and most recently, cash transfers.

It is interesting that this focus on poverty alleviation still takes a very limited view of what poverty is or how it is generated. Essentially, this is an approach that somehow abstracts from all the basic economic processes and systemic features that determine poverty. So class tends to be absent from the discussion, or included only in the form of ‘social discrimination’, with the economic content effectively wiped out. The poor are not defined by their lack of assets – which would then necessarily draw attention to the concentration of assets somewhere else in the same society – but by lack of income or various other dimensions (such as poor nutrition, bad housing and inferior access to utilities and basic social services, and so on) that are actually symptomatic of their lack of assets but not expressed as such. Similarly they are not defined by their economic position or occupation, such as being workers engaged in low-paying occupations or unable to find paid jobs or having to find some livelihood in fragile ecologies where survival is fraught with difficulty.

Macroeconomic processes are entirely ignored, such as: patterns of trade and economic activity that determine levels of employment and its distribution and the viability of particular activities; or fiscal policies that determine the extent to which essential public services like sanitation, health and education will be provided; or investment policies that determine the kind of physical infrastructure available and therefore the backwardness of a particular region; or financial policies that create boom-and-bust volatility in various markets. No link is even hinted at between the enrichment of some and the impoverishment of others, as if the rich and the poor somehow inhabit different social worlds with no economic interdependence at all, and the rich do not rely upon the labour of the poor. This shuttered vision is particularly evident in the neglect of the international dimension in such analyses, and particularly of the way in which global economic processes and rules impinge on the ability of states in less-developed countries to even attempt economic diversification and fulfillment of the social and economic rights of their citizens.

These silences enable a rather two-dimensional view of the poor. They are given the dignity of being treated as subjects with independent decision-making power, but their poverty is more a result of their own particular circumstance and their own often flawed judgements, which can be tweaked through interventions that would somehow make them more economically successful. They apparently inhabit a world in which their poverty is

unrelated to wider social, political and economic contexts, or to historical processes. Since these larger issues are not addressed at all, the only dilemma posed for policy practitioners is which particular poverty alleviation scheme to choose and how to implement it.

In turn, for making such policy decisions, the newest research instrument of choice is that of the randomized control trial (RCT), especially as developed by the Massachusetts Institute of Technology (MIT) Jameel Poverty Action Lab and similar institutions. Once again, the mainstream discipline has wandered off in a diversionary excursus that prevents a much-needed focus on the real issues of development. Yet the problems with the widespread use of RCTs in this manner extend beyond the important fact that they completely ignore the broader macro processes: quite apart from the problems of identification and measurement that generate the statistical problems associated with RCTs as predictors of behaviour or outcomes, there is the simplistic and mechanical belief that what has ‘worked’ in one context can be easily defined and can work in another quite different context. The particularization and miniaturization of a complex development experience into an examination of the conditions and responses of individual poor persons or poor households then lead, without any sense of irony, to a universal set of homilies about strategies for their betterment.

Rescuing development economics from the miasma created by the discourse on poverty alleviation would require recognizing that the process of development is an evolutionary one in which there is a continuous interplay of various forces; that economic outcomes reflect social and historical factors, the level and nature of institutional development, relative class and power configurations; and that the processes of production and distribution inevitably involve the clash of class interests along with the interaction of social, historical and institutional factors.

THIS VOLUME: AN OVERVIEW

This volume is divided into three parts. Part I is on historical processes of development, where we have attempted to avoid the usual Eurocentrism by including chapters on Chinese, Indian, Muslim, Ottoman and African perspectives on development. Part II covers modern theoretical approaches to development, and here we have also included chapters on three twentieth-century economists with original and valuable perceptions of development, in alphabetical order: Christopher Freeman (1921–2010), Albert O. Hirschman (1915–2012), and Michal Kalecki (1899–1970). Part III focuses on more specific issues and debates in the field of economic development.

In spite of our attempt to cover the field as broadly as possible within the space available, there are still fields that are not covered. We would therefore like to mention some of them briefly here. We have not covered anthropology. Particularly relevant would have been to explore Karl Polanyi (1886–1964) and his three fictitious commodities defining capitalism: (1) land as private property; (2) labour as a commodity; and (3) money. We can just recommend any serious student of economic development to explore, through Polanyi, how the economy functioned during the first 99 per cent of human history (see Polanyi 1944).

Entrepreneurship is another important field which has not been covered. In an attempt partly to compensate for this, the editors would like to draw the readers’ attention

to an original work on entrepreneurship – individual and collective – and economic development by Everett Einar Hagen (1906–1993): his 1962 work *On the Theory of Social Change: How Economic Growth Begins*. Hagen uses psychology, sociology and anthropology in order to explain the transition from traditional to ‘modern’ societies, approaches which are under-represented in this volume. Hagen asserts the role of non-conformists – marginal groups – as providing entrepreneurs, be they Quakers or Jews in Europe, Old Believers in nineteenth-century Russia, or Indians in East Africa. To Hagen, ‘relative status withdrawal’, for both individuals and groups, is a key factor in explaining entrepreneurship. The work of Massachusetts Institute of Technology (MIT) professor Everett Hagen was strongly disliked by his Harvard colleague Alexander Gerschenkron (1904–1978), an author who could very well have been added as the fourth person deserving his own chapter in this volume.²³ So, in a somewhat strange way our two omissions – entrepreneurship and Gerschenkron – cancel out.

Unfortunately we have not been able to secure a chapter on Nicholas Kaldor (1908–1986), whose theories, emphasizing increasing returns and ‘economics without equilibrium’, fit very well with the general approach of this volume.²⁴ Neither do we have a separate chapter on the important role played by the state in promoting economic development. This subject, however, has been covered elsewhere (Reinert 1999).

Thorstein Veblen (1857–1929) and his school are not represented, but for a recent evaluation of his work, also as it relates to economic development, see the volume *Thorstein Veblen: Economics for an Age of Crises*.²⁵

There is no chapter dealing specifically with the issue of demography and population. As touched on in Chapter 1, population density – the carrying capacity of cities and areas in terms of human beings – was a major underlying factor to be explained in the early development economics of Giovanni Botero (1544–1617). Why did some limited areas on the European map – such as Florence, Venice or Amsterdam – display both generalized wealth and a very high population density? To Botero the answer was to be found in the economic structure of cities: a large diversity and differentiation of manufacturing industries – what Adam Smith much later would refer to as ‘the division of labor’ – provided the explanation of both the wealth and the population density. Some years later, Antonio Serra (fl. 1613) provided the theoretical underpinning of Botero’s theory: at the centre of the virtuous circles of development of cities were the increasing returns, the falling unit costs – found in manufacturing but not in agriculture – that formed the basis of the virtuous circles of economic development (Serra 2011 [1613]). The work of Jane Jacobs (1916–2006) on the role of cities contains a logic similar to Botero’s (Jacobs 1984). Also important for Jane Jacobs, development was a product of differentiation. More recently Richard Florida (2005) has again focused on the role of cities.

The general perception of the link between population density – human agglomeration – and wealth that came to dominate the 1600s and 1700s led to a pro-population policy across Europe. Nowhere was the lack of people, *a falta de gente*, seen as acutely as in

²³ This is reflected not only in Gerschenkron’s own writings, but also in the biography written by his grandson, Nicholas Dawidoff (2003).

²⁴ For an overview of theories of cumulative causation, see Toner (1999).

²⁵ Reinert and Viano (2012). On institutions and development see also Reinert (2006a). An abbreviated version is found in Reinert (2007).

Portugal with its geographically expansionist policies (Almodovar and Cardoso 1998, 28). But also William Petty (1623–1687), who might be called the first English economist, recommended the movement of people from the periphery closer to London. No doubt Petty's understanding of the positive link between population density and economic wealth came from his study of Holland, at his time the wealthiest country in Europe. At the centre of the economic circles of another early economic geographer, Johann Heinrich von Thünen (1783–1850), a manufacturing city was also at the centre of his concentric circles.

It was only with Reverend Thomas Malthus (1766–1834) and his *An Essay on the Principle of Population* (1798) that an increase in population turned from being positive to being a threat to wealth. Botero too understood that population could be too large, although the first early alarmist on population was another clergyman, the Venetian monk Giammaria Ortes (1713–1790). But implicitly or explicitly (as with Antonio Serra in 1613) what we here broadly label as development economics was, for centuries, based on cultivating the increasing-returns activities found in cities. This brought with it a pro-population view: the size of the market was important. It was only in 1898 with Malthus that the perils of diminishing returns, and consequently the dangers of overpopulation, came into focus. Only then was economics reborn as 'the dismal science'.²⁶

The West – Europe and North America – is experiencing mass immigration while experiencing serious challenges within its own borders. The periphery of the European Union, particularly the countries kept in the straightjacket of the euro single currency, is experiencing serious economic problems; and in the United States the middle class, which came with industrialization, appears to be shrinking with the manufacturing industry that once created it. In the Middle East, and partly also Africa, civil society is being torn apart in political and religious strife. In the war-torn parts of the Middle East the standard measurement for economic welfare, gross domestic product (GDP) per capita, has been plummeting for decades.

At the time of writing in 2016, more than 25 years after the fall of the Berlin Wall, the world is experiencing an exhaustion of the triumphalism that followed that event. We could even say that the political world, especially in the West, is bewilderedly recovering from a hangover from an ideological overdose of one type of economic theory. The 1989 fall of the Berlin Wall has proved neither to represent *The End of History*, as in Frances Fukuyama's 1989 article and 1992 book, nor *The End of the Nation-State*, as in Kenichi Ohmae's 1995 book. Instead we seem to see emerging patterns of crises – political and religious – and decline which are well known from both recent and past history. The old axes are still with us: the cosmopolitical theories, Manchester liberalism (nineteenth century), Communism and neoliberalism, still face opposition from ideologies which insist that geography, ethnicity, religion and the nation-state have to play a role. On the other hand, as Carlota Perez has observed, it is crucial that we understand the isomorphism – the underlying equalities – of the two parties that fought the Cold War from the end of the 1940s to the end of the 1980s: both Communism and Western capitalism were based on the cult of the manufacturing sector.

We shall attempt to show the continuity between the earliest development economists

²⁶ For a still valuable study of this, see Stangeland (1966 [1904]).

of the late 1500s and the most spectacularly successful period of growth ever seen, from the late 1940s to the 1980s. The contexts differ, but the main mechanisms behind economic development are very similar over time.

In analysing the history of economic development we argue that that several axes must be kept in mind. Looking at grand cosmopolitical schemes versus context-specific adaptation of different economic theories adds a useful dimension to a tired perspective that places ideas on a left–right axis. On the other hand we must also keep in mind that the grand schemes on the right–left axis – what was originally Marshall-help type Western capitalism and Soviet industrialism – both rested on the cult of manufacturing industries based on dynamic imperfect competition under increasing returns. Also, China and India, where the majority of the poor who have been lifted out of poverty live, have since the late 1940s both depended on development strategies built on manufacturing, albeit with varying degrees of success.

Part I of the *Handbook* deals with a blend of economic history, history of economic policy and the history of economic thought. In Chapter 1, Erik Reinert introduces works of Giovanni Botero (1588) and Antonio Serra (2011 [1613]) as the founders of the theory of economic development, theories that also implicitly explain poverty. In Chapter 2, Sophus Reinert argues that the history of European economic policy has been dominated by emulation – attempting to copy the economic structure of the wealthiest countries – and only later was the principle of comparative advantage adopted. In Chapter 3 Erik Reinert and Philipp Rössner discuss the German economic tradition, which – compared to the Anglo-Saxon tradition – has focused on production rather than on trade and barter. In Chapter 4, Arno Daastøl discusses the work of German economist Friedrich List, who more than anyone else contributed to the industrialization of continental Europe and to some extent also of the United States. The editors would also like to point to a recent paper outlining the continuity of Friedrich List's policies, and even bureaucracy, between the Tsarist and Bolshevik regimes in Russia (Panchenko forthcoming). In Chapter 5, Wolfgang Drechsler gives an overview of key debates in the hugely influential German Historical School.

Chapters 6 and 7 look at economic development from a Chinese angle. In Chapter 6, Ting Xu contrasts European and Chinese production of science and knowledge. In Chapter 7, Xuan Zhao depicts China's imperial political cycles as failing to escape out of a fundamentally agricultural society. Both chapters refer to the lack of diversity as a reason for China falling behind Europe. Chapter 8 contains a fascinating historical account of the interaction of the Islamic world and capitalism by Ali Kadri, which also critiques the misleading interpretation of Max Weber. In Chapter 9, Eyüp Özveren, Mehmet Salih Erkek and Hüseyin Safa Ünal describe how Turkish thinkers such as Ziya Gökalp and Ethem Nejat adapted List's approach to what became the Ottoman School of economics. Goddanti Omkarnath provides a synoptic overview of Indian development thinking in Chapter 10, moving from the framework outlined in the *Arthashastra of Kautilya* in the second century AD all the way to post-Independence approaches to development up to the late twentieth century.

Chapter 11 by Mario Cimoli and José Porcile reviews some of the main contributions of Latin American structuralism to the theory of economic development. Two chapters are concerned with African approaches to development. In Chapter 12, Issa Shivji revisits the debate on national autonomous development in Africa; while in

Chapter 13, Yash Tandon considers the fate of the idea of national development as liberation.

Chapters 14–16 consider how the problem of development was formulated in international terms over the twentieth century until the backlash created by the Washington Consensus: Carolyn Biloft (Chapter 14) on the League of Nations; Jean-Christophe Graz (Chapter 15) on the Havana Charter just after World War II and Ricardo Bielshowsky and Antonio Carlos Macedo e Silva (Chapter 16) on the United Nations Conference on Trade and Development (UNCTAD) system of political economy as it developed over the second half of the twentieth century.

Part II of the volume considers different analytical approaches to development, as expressed both in particular schools of thought and in the work of a few selected scholars. Prabhat Patnaik in Chapter 17 focuses on how Marxist thinkers have analysed the genesis of underdevelopment, the post-decolonization trajectories of development in the underdeveloped economies, and the impact of neoliberalism on these economies. Chapter 18 contains an assessment by Richard Nelson of Schumpeterian and evolutionary approaches to development. In Chapter 19, Rainer Kattel, Jan Kregel and Erik Reinert summarize key arguments by the so-called development pioneers working in the aftermath of World War II (such as Paul Rosenstein-Rodan, Hans Singer, Arthur Lewis, Albert Hirschman, Gunnar Myrdal and Ragnar Nurkse). Robert Boyer dissects the relationship of *régulation* theory to development in Chapter 20. In Chapter 21, José Gabriel Palma takes a closer look at one of the key development theories from Latin America, the ‘dependency school’ and its aftermath. Feminist approaches to development have hugely gained in importance over the last decades and they are discussed by Maria Sagrario Floro in Chapter 22.

Three major scholars who contributed significantly to the understanding of the process of development as well its uneven trajectories are considered individually. Rodrigo Arocena and Judith Sutz assess the contributions of Christopher Freeman (Chapter 23); Michele Alecvich discusses the insights provided by Albert Hirschman (Chapter 24) and Jayati Ghosh considers how Michal Kalecki saw less-developed countries as fundamentally different from developed capitalist economies (Chapter 25).

Part III of the book includes specific discussions of varied issues in development thinking, starting with the discussion by Sam Moyo, Praveen Jha and Paris Yeros of the agrarian question. In Chapter 26 they trace the evolution of the agrarian question, in particular by taking issue with the dominant wisdom which has remained largely trapped in industrialization discourse. Jan Kregel provides an overview of approaches to the financing of development at both national and international levels in Chapter 27. In Chapter 28, C.P. Chandrasekhar takes a closer look at development planning, which gained ascendancy in the period immediately after World War II when decolonization led to the emergence of a number of newly independent underdeveloped countries. Scandinavian countries have come to epitomize development success stories, so in Chapter 29, Lars Mjøset charts in detail the route these countries took over the course of the past two centuries. Competitiveness is one of the ubiquitous terms that is laden with normative assumptions; in Chapter 30, Mehdi Shafaeddin delivers a discussion of competitiveness and development from a Schumpeterian perspective. This is followed by bringing innovations systems theory, one of the more potent outgrowths of Schumpeterian theory, into the context of development, by Bengt-Åke

Lundvall in Chapter 31. The following two chapters are closely related: in Chapter 32, John Mathews contextualizes China's rise within the discussion of latecomer development proposed by Alexander Gerschenkron and Alice Amsden; and in Chapter 33, Elizabeth Thurbon and Linda Weiss track the evolution of the concept of the developmental state from its historical origins to its potential in today's development discussions.

The next four chapters take closer, detailed looks at specific facets of development and alternative advances in our understanding of these issues. Edward Barbier and Jacob P. Hochard in Chapter 34 challenge the widespread perception of poverty–environment relationships in developing economies which holds that because many of the poor people in developing regions are located in fragile environments, they must be responsible for the majority of the world's ecosystem degradation and loss – even though their livelihoods are directly affected by such environmental destruction. In Chapter 35, Ajit Singh explores the connections between competition, competition policy, competitiveness, globalization and development. Leonardo Burlamaqui maps the fundamental changes that have taken place in the field of intellectual property rights and regulations over the last three decades, and offers in Chapter 36 an alternative paradigm of how to conceptualize intellectual property rights and their governance in the twenty-first century. Chapter 37 by Jürgen Backhaus shows the key importance of legal structures in development.

The last three chapters have a relatively sombre undertones as they discuss some of the more negative experiences of development. Fiona Tregenna offers a critical review of some central issues emerging from the literature on de-industrialisation in Chapter 38. This is followed by a discussion of one of the more drastic cases of industrial extinction, namely that of some of the post-Soviet states; Georgi Derluguian charts some of the consequences of these processes in Chapter 39. The final chapter of the book, Chapter 40 by Sylvi Endresen, Ioan Ianos, Erik Reinert and Andrea Saltelli, looks at utopias and dystopias facing us over the coming years.

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PART I

DEVELOPMENT THINKING ACROSS HISTORY AND GEOGRAPHY

1. Giovanni Botero (1588) and Antonio Serra (1613): Italy and the birth of development economics

*Erik S. Reinert**

Secretary of State George Marshall got it right in his June 1947 Harvard speech when announcing what later was to be called the Marshall Plan: ‘There is a phase of this matter which is both interesting and serious. The farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life. This division of labor is the basis of modern civilization’.

The Marshall Plan – a plan to re-industrialize Germany and later the rest of Europe – came as a substitute for the Morgenthau Plan, the goal of which had been the exact opposite: to de-industrialize Germany to prevent further wars. The arguments for discontinuing the Morgenthau Plan were forcefully made by President Truman’s envoy to Germany, former President Herbert Hoover. In his letter a few months earlier Hoover had pointed to the key link between a nation’s economic structure and the number of people it can carry: ‘There is the illusion that the New Germany left after the annexations can be reduced to a ‘pastoral state’. It cannot be done unless we exterminate or move 25 000 000 out of it’.¹

Marshall and Hoover go to the core of economic development, reviving a long tradition that explains development and population density with the economic activities found in cities. In his 1588 treatise *On the Greatnesse of Cities* Giovanni Botero describes why the few islands of generalized wealth at the time were found in cities with their large division of labour, technical change, and the high value added given to imported raw materials. In 1613, Antonio Serra adds the argument that the core of the virtuous circles of growth is found in increasing returns to scale. As we shall see, Botero’s intellectual impact on Europe in the 1600s was formidable, but now not recognized, while Serra – who provided the theoretical explanation – was virtually forgotten until his work was briefly rediscovered in the 1750s.

When World Bank Chief Economist Justin Yifu Lin recently wrote, ‘Except for a few oil-exporting countries, no countries have ever gotten rich without industrialization first’ (Lin 2012, 350), he is essentially only confirming Botero’s and Serra’s point. Functional theories of economic development, including those of United States (US) Secretary of the Treasury Alexander Hamilton (1791), German economist Friedrich List (1841), who provided continental Europe’s rationale for industrialization, and post-World War II (WWII) classical development economics – whether they were recognized or not² – were all based on the principles first observed by Botero and theorized by Serra as being

* This chapter is the result of a long cooperation with my son Sophus A. Reinert. The usual disclaimer applies.

¹ Hoover’s Report No. 3, 18 March 1947, quoted in Baade (1955).

² Friedrich List referred to Serra, whose book had been republished in 1803, but not to Botero.

the result of cumulative causations originating in increasing returns. As this volume is going to press (July 2016), the newly appointed World Bank Chief Economist – Paul Romer – again resurrects and confirms – but without reference – the approach and the theories first developed by Giovanni Botero and Antonio Serra: using ‘the city as a unit of analysis’³ and finding development to be the result of human industrial agglomeration.

On the other hand, the diminishing returns found in agriculture and the extraction of raw materials have provided pessimism, from Thomas Malthus (1798) to Alfred Marshall, the founder of neoclassical economics, who in his 1890 *Principles of Economics* pointed to diminishing returns as ‘the cause of most migrations of which history tells’ (Marshall 1890, 201).

Probably inspired by Malthus, nineteenth-century classical economists, such as John Stuart Mill, were acutely aware of the importance of diminishing returns:

I apprehend [the elimination of diminishing returns] to be not only an error, but the most serious one, to be found in the whole field of political economy. The question is more important and fundamental than any other; it involves the whole subject of the causes of poverty . . . and unless this matter be thoroughly understood, it is to no purpose proceeding any further in our inquiry. (Mill 1848, 176)

Ex-President Herbert Hoover, quoted above, testified to the fact that killing increasing returns industries – manufacturing – would lead to the migration, or even worse, the extermination of 25 million people in post-WWII Germany.

I would argue that the lost connection between economic structure and population density is perhaps the biggest elephant in the room of today’s economic academia. We find that the de-industrialization of many Third World countries, as civil war and bombs and/or premature free trade destroy manufacturing, produces mass migration. The only long-term solution to the surging refugee problem is to recognize the wisdom of George Marshall and Herbert Hoover: reindustrialize in order to re-create civilization and increase the carrying capacity of the Third World to create livable conditions for its own population.

In their *Communist Manifesto*, Marx and Engels also emphasize the importance of towns and cities:

The bourgeoisie has subjected the country to the rule of the towns. It has created enormous cities, has greatly increased the urban population as compared with the rural, and has thus rescued a considerable part of the population from the idiocy of rural life. Just as it has made the country dependent on the towns, so it has made barbarian and semi-barbarian countries dependent on the civilized ones, nations of peasants on nations of bourgeois, the East on the West. (Marx and Engels 1848, Ch. 1)

As alluded to in the Introduction to this volume, the isomorphisms, the structural similarities, between both political sides of the Cold War – the historical insistence on industrialization and on the control of the financial sector – are key elements that were unlearned during the market triumphalism following the 1989 fall of the Berlin Wall.⁴ In

³ This approach is described in <https://paulromer.net/my-new-position-as-chief-economist-at-the-world-bank/>.

⁴ I have pointed to the cyclical nature of economics in this aspect (Reinert 2012).

this chapter I shall discuss Giovanni Botero and Antonio Serra as pioneer development economists, but first it is necessary to look at the context in which their ideas arose.

‘OUT OF ITALY’

The importance of cities for modern civilization has a long history that can only be very briefly sketched here.⁵ During the eighteenth and nineteenth centuries so-called stage theories of economic development were very prominent; some even argue that these theories were a foundation stone for economics itself (Meek 1976). The normal stages were seen as: (1) the Age of Hunting; (2) the Age of Pastoralism; (3) the Age of Agriculture; and (4) the Age of Agriculture and Manufacturing. In the teachings of German economist Karl Bücher (1847–1930), these different stages – different forms of social livelihood – were accompanied by different forms of human social organization. The first stages were dominated by family economy and clan economy, where Karl Polanyi’s fictitious commodities of capitalism – private ownership of land, labour as a commodity, and money – are absent. It is only with the town economy that capitalism develops. Bücher, as did Polanyi, places great emphasis on the fact that the division of labour existed inside the family, clan economies and in aristocratic households long before there were markets. The city-centred theories of development can be traced back to Arab historian Ibn Khaldun (1332–1406), who produced a cyclical theory of history where desert tribes conquer cities, only to decay over time and become the prey of a fresh group of nomads, who undergo the same experience. Cyclical theories were typically zero-sum games that only with the Renaissance gave way to the possibility of progress.

At the core of stage theories is that the mode of production – that is, whether you are in the Stone Age or the Computer Age – will determine your institutional structure. In the stage tradition of Karl Bücher, the structure of production tends to influence the institutional structure more than the other way around.⁶ Working both with pastoralism in the high Andes and with Saami reindeer herders in Northern Fennoscandia, I can testify to the striking similarities in the social organization of pastoralists from so different areas and cultures. Ibn Khaldun, like Bücher, saw that ‘The differences between different peoples arise out of the differences in their occupations’.⁷ This observation tends to reverse the arrows of causality in economic development compared to the formal theorizing in modern institutional economics, for example Acemoglu and Robinson (2012).⁸ I

⁵ For an overview see Reinert (2000b, 177–222).

⁶ This view is largely compatible with Diamond (1997). Anthropologists argue that the institution of cannibalism tends to appear in environments with limited sources of animal protein, for example in Central America and the Caribbean. The conditions create the institutions, not the other way around.

⁷ Ibn Khaldun quoted in Issawi (1987, 17).

⁸ In their criticism of Diamond, Acemoglu and Robinson (2012, pp.51–53) show what might be their weakest point. When explaining that ‘North America became more prosperous [than Peru and Mexico] precisely because it enthusiastically adopted the technologies and the advances of the Industrial Revolution’ (p. 53), the authors leave out that Peru and Mexico for a long time were colonies, and later de facto colonies, as power just shifted from Spaniards in Spain to Spaniards – with the same vested interests in exporting raw material – in the former colonies. The key characteristic of a colony was that manufacturing was prohibited. That the United States was prohibited from manufacturing most things other than tar and timber for masts was an important reason for the 13 colonies wanting independence from Britain in 1776. The right for the necessary protection of

would argue, in the Bücher tradition, that the Venetians did not invent an official property register (*catasto*), around 1150, later to create capitalism, but rather because the capitalist growth of the city created a need for the property register. Likewise, one could argue that the Venetians did not invent insurance, and then, based on this, start long-distance trading. Rather, one could argue that the previous system of spreading risk through ever smaller percentages of ownership of ships and cargo became impracticable because of the many owners, and that the impracticability of this fractionalized ownership is at the origin of a system of insurance: risk is being spread without spreading ownership. In practice, economic activities and their institutions co-evolve, and the first geographical area where this process of co-evolution created capitalism was in the Italian city-states starting in the twelfth century.⁹

The principle that economic modes of production influence the creation of institutions more than the other way around forms the core of what I refer to as ‘Other Canon Economics’, and has very important practical consequences. In 2014, on one of two visits to Zimbabwe, in conversations with key policy-makers under the influence of the Washington Consensus, I observed that their policy was to attempt to change institutions without changing the economic structure. This approach totally disregards that most African countries reflect a pre-capitalist clan structure that Europe only got rid of by creating city activities and industrialization. It is very unlikely that Africa can create a genuine institutional change without first changing its economic structure. This has simply never been done before.

Changes of national economic structures have invariably been a result of policies involving import substitution and tariffs. England protected its economy for 300 years, South Korea for perhaps only 40, but economic policy has always been a key element in economic transformation. Sometimes this economic policy has been conscious and voluntary, as with the Tudor strategy shifting England’s comparative advantage from the export of raw wool to the export of woollen cloth. This started with Henry VII in 1485 and in the end, under Elizabeth I, prohibited the export of raw wool from England (Reinert 2007). Sometimes the ‘natural’ protection of time, distance and transportation costs has been important, as in the early industrialization of Australia and New Zealand. In other cases, the import substitution policies have been imposed from the outside, as during the collapse in US imports during the blockades of the Napoleonic Wars, and in the case of the rapid industrialization of Southern Rhodesia, present-day Zimbabwe, as a result of the country being boycotted due to apartheid.¹⁰

What marks the start of what we call development economics? Clearly, systematic attempts to understand society in order to increase its wealth started during the

new technologies had to be won twice in the United States: first in 1776 and then with the Civil War, where the South wanted free trade. As my short history of Latin America has been for decades: ‘Latin America is a group of countries where the South won the Civil War’. By disregarding the history of economic policy – that prohibiting manufacturing was generally at the core of colonial policies – Acemoglu and Robinson tend to blame the present elites of the Third World for conditions that historically have been imposed upon their countries by First World imperialism. In a sense they blame the victims. For a criticism of Acemoglu and Robinson from a historian’s viewpoint, see Vries (2012). See also a discussion in the Epilogue, Chapter 40 in this volume.

⁹ The massive work on *Der Moderne Kapitalismus* by Werner Sombart (1863–1941), on which Braudel partly rests, will in 2016 be published for the first time in a full English translation of the 1916 six-volume edition as *Modern Capitalism (1916)* (Sombart forthcoming [1916]).

¹⁰ Manufacturing as percentage of gross domestic product (GDP) rose to more than 30 per cent.

Renaissance – literally, the rebirth – of the cultural traditions of classical society. This tradition, to cite the title of one of Fernand Braudel's books, came 'out of Italy' (Braudel 1991; see also Braudel 1975). This may sound like an innocuous proposition, but at a 2008 State of the Planet conference at Columbia University, to which Jeffrey Sachs had invited me, I found it was not. When I mentioned this fact during my talk, Professor Sachs arose in an audience of several hundred people and virtually screamed at me that this was not true, capitalism was born in England.

Professor Sachs's reaction is part of the Anglo-Saxon bias that we refer to in the Introduction to this volume. This is a myth similar to those created also earlier in history. The Roman Empire clearly built on previous local cultures, the Etruscan culture being the most important, but in order to obliterate any debt to previous civilizations the Romans created the myth of the city being founded by Romulus and Remus who were brought up by *la lupa* (the she-wolf). The relatively short-lived Inca Empire, essentially a forced political integration of several advanced agricultural societies, created a similar myth among many: the first Inca, Manco Capac, and his sister-wife Mama Ocllo, emerged from Lake Titicaca and founded the Empire. Unfortunately the Adam Smith myth plays a similar role in the minds of most modern economists: civilization started with the English-speaking world.

Capitalism came out of Italy in the sense that capitalism was born in the Italian city-states. As probably the most important historian of capitalism, Werner Sombart, puts it, the defining feature of capitalism is neither private property nor the division of labour, it is the fact that accumulation does not stop when the needs of the immediate family have been met. Capitalism has an element of *magna facere* – of doing great things beyond immediate need – about it. A curious example of this could be observed in Bologna in the 1100s and 1200s. Over a relatively short period more than 180 huge towers were erected in the city (Roversi 1989). Despite their appearance of military might, the towers of Bologna would only have been of limited military use, due in part to their suffocating proximity to each other. The towers were true, pure monuments in themselves. Behind this fanatical building spree, there was the need for the richest local families to display their power and might, as they competed against each other in the papal/imperial investiture controversy.¹¹ In Thorstein Veblen's terminology, Man's 'instinct of workmanship' was allowed to flourish in this display of 'emulation'¹² among wealthy families of Bologna in their 'conspicuous consumption'.¹³ At the same time their 'parental bent' secured the construction of livable societies. The tower fury can also be seen as an early case of what Albert Hirschman describes as economic ambition – in this case competing through the building of towers – introduced as a substitute for passions in the form of warfare (Hirschman 1977, 134.) As a necessary part of this Renaissance development came a set of bourgeoisie values first codified by the Florentine scholar Leon Battista

¹¹ The war between the Guelfs and the Ghibellines plagued the Italian peninsula at the time.

¹² It is important to note that the instinct of emulation in many cases will lead to the exact opposite recommendation from that of David Ricardo's comparative advantage. If a Stone Age tribe discovers that the tribe across the river has discovered a new material and moved into the Bronze Age, Veblen's type of analysis will recommend them to follow into the Bronze Age by emulation, while Ricardo will tell them to stick to their comparative advantage in the Stone Age.

¹³ For a discussion of Veblen as a development economist see Reinert and Viano (2012).

Alberti (1404–1472)¹⁴ and later made famous in the writings of Benjamin Franklin (1706–1790),¹⁵ whose *Way to Wealth*, reaching more than 1100 editions before 1850, no doubt is the top economic bestseller in history.¹⁶

The inspiration came from classical Greek texts. Many of them, surviving because they had been translated into Arabic in the great translation factory that was Baghdad around 800, were translated into Latin. Xenophon (c.430–355 BC), whose works were brought from Byzantium to Italy in 1427, gave us the term economics from his work on household management: *Oeconomicus*. Together with Aristotle, this work had considerable influence on the evolution of Scholastic economic thought through a text by Xenophon written around the year 352 BC: *Poroi – On the Ways and Means of Improving the Revenues of the State of Athens*. The influence of the *Poroi* has never been well charted.¹⁷

Xenophon sought both to explain and to remedy the ongoing balance-of-payments crisis that Athens had suffered as a consequence of the so-called ‘Social War’ against its former allies (Isocrates 355 BC, Verse 19). Xenophon refers to what we could call ‘systemic increasing returns’ when, in the *Poroi*, he suggests that certain problems in a city can be solved by making the city larger.

Italian economic historian (and many times Prime Minister) Amintore Fanfani encapsulated, without explaining, the shift explored here: ‘while scholasticism thinks of an order in equilibrium, mercantilism thinks of an order in growth’.¹⁸ In a sense, neoclassical economics returned to a view more similar to scholasticism (Reinert 2000a).

INFINITE COSMOLOGY: THE POSSIBILITY OF PROGRESS AND THE END OF ZERO-SUM SOCIETY

When George Soros claimed that ‘Globalization is not a zero sum game’ (Soros 2002, 9) he unwittingly touched upon the very problem that faced economic thinkers at the end of the Renaissance, as they indeed feared that it was a zero-sum game. The modern conception of history and economics reflected in Soros’s statement is entirely dependent on our cosmological conception of time as a vector of progress, as a linear force that potentially brings never-ending change in a space of infinite resources. Starting in the Renaissance production-centred economics – in what I refer to as The Other Canon – economic thought has been intimately intertwined with this idea of a historical progress with infinite possibilities; it indeed forms the very framework of economic thinking from the earliest stage theories to the contemporary neo-Schumpeterian approach. This conception of time is, however, a relatively recent development in what Veblen calls ‘the life-history of our species’. ‘Time’ was for the longest time thought of in very different terms. The

¹⁴ The first modern publication of his work on this is Alberti (1734). On Alberti see Grafton (2000).

¹⁵ For the classical discussion on the values of capitalism, see Sombart (1913). Sombart discusses both Alberti and Franklin.

¹⁶ See <http://waytowealth.org> (accessed 25 September 2015). For a discussion on Franklin’s work, see S. Reinert (2015).

¹⁷ The Latin phrase indicates that Aurispa brought the entirety of Xenophon’s corpus with him from Byzantium: ‘*omnia quicquid scripsit*’ (Baron 1938; Sombart 1913; Bruni 1987, 300–311).

¹⁸ In Italian: ‘mentre lo scolasticismo pensa ad un ordine in equilibrio, il mercantilismo pensa ad un ordine in accrescimento’ (Fanfani 1955, 149).

idea of economic progress is thus quite intertwined with the modern idea of time as an indicator of change, as well as the idea of spatial infinity following from the heresies of the 1500s: of the ideas of Copernicus, Bruno and Galileo.

The world was seen as being a finite place, a locked system in cosmic equilibrium. This zero-sum model of the universe was an Aristotelian invention (Aristotle, *Politics* vii, ix, 3, 1328b), channelled by St Jerome (c.340–420) and Thomas Aquinas (c.1225–1274). The early ‘balance of trade’ was strongly related to the theory that ‘one man’s gain must be another man’s loss’.¹⁹ The same idea appeared again in Switzerland as an essential part of Paracelsus’ work (c.1493–1541). Being a cosmologist rather than a scientist, Paracelsus’ hermetic tradition had an enormous influence on the reigning episteme, and the influence of his work indeed echoed across Europe into the seventeenth century and beyond (Paracelsus 1951, 38–44). In France, Michel de Montaigne (1533–1592) argued in his 1580 *Essays* that ‘no profit can be made except at another’s expense, and so by this rule we should condemn any sort of gain’ (Montaigne 1958 [1580], 48). Similarly, England saw Sir Thomas Browne’s (1605–1682) 1643 *Religio Medici* hold that ‘all cannot be happy at once for, because the glory of one state depends upon the ruins of another, there is a revolution and vicissitude of their greatness’ (Browne 1643, Book I, xvii). The zero-sum view of the economy was a pan-European phenomenon.

This is, of course, not to say that there were no earlier exponents of various aspects of this change. Indeed, positive-sum undercurrents are identifiable across the European mindscape throughout the Middle Ages, and the importance of time for economic gain was already present in explicit form in the tenth-century *Colloquy* of Ælfric of Eynsham (Wood 2002, 117). It was, rather, the cumulative culmination of a number of these correlated factors – the new cosmology, the change in religious outlook, the understanding of an extension of the synergetic common good – that constituted the epistemic shift which made innovation into something desirable rather than something heretic and threatening to God’s plans.

INFINITE COSMOLOGY: RELIGIOUS CAUSES AND EFFECTS

In a previous co-authored paper, I have treated in detail the religious aspects of the Renaissance as they relate to the birth of innovations (Reinert and Daastøl 1997). I shall summarize the most important features here.

The emerging neo-Platonic world saw all creation in the spirit of God; it was pantheistic. The philosophers of this creed pointed out the need to explore and to better understand Nature as a necessary way to know God. They conveyed an image of God as active, rational and creative. Since Man was created in the image of God, the human being also had the potential for these same qualities, both as individuals and collectively as a ‘social body’. This permission to seek new knowledge – to learn, explore, invent and educate – soon developed into a duty to do so. Creation was not ended on the seventh day, it was God’s will that man should be creative in order to improve on the creation, and thereby improve both his own condition and that of his fellow human beings, all the

¹⁹ St Jerome, cited in Finkelstein (2000, 89).

members of the social body of society. It was our duty to populate the Earth, so the Lord had built in an incentive system for procreation. Likewise, the Continental philosophers in the tradition of Leibniz (1646–1716) and Christian Wolff (1679–1754) would argue, the fact that it was so satisfactory to discover new things and understand the world better was a proof of our duty to do so. It became Man's pleasurable duty to explore, discover, invent and innovate.

This transition was not frictionless or painless. A forerunner of these thoughts, Nicolas of Cusa (1401–1464), the German-born Bishop of Brixen (Bressanone), now in Italy, suffered persecution. Giordano Bruno, one of his spiritual followers, was burned at the stake in Rome in the year 1600. Bruno laid the foundations for the works of Kepler, but also for the tradition of Galileo and Newton. The religious persecutions of new knowledge are well known.

The influences from the Byzantine Empire – one of the very few millennium empires the world has ever seen – were very strong in these processes. This applies both to the diffusion of Plato's texts and in the religious redefinition of Man's duties on Earth, no longer as a caretaker in the garden of creation, but as a junior partner in the process itself. The fall of Constantinople to the Turks precipitated an influx of philosophers and texts from the East into Italy, and the presence of these philosophers added much prestige to the Italian city-state courts. The most influential of these Byzantine philosophers was George Gemistos Plethon²⁰ (c.1360–1450). It was Plethon's enthusiasm for Platonism that influenced Cosimo de Medici to found a Platonic Academy at Florence, one of the earliest of the academies that were to be so important for the later growth of knowledge in Europe. In 1441, Plethon had returned to the Peloponnesus, and there he died and was buried in 1450.

Just as the young Republic of Venice snatched the body of San Mark from Alexandria to bury him in Venice, thereby adding to the power and prestige of the city, so the Malatesta family of Rimini had Plethon's body removed from his resting place in the Peloponnesus to the Tempio Malatestiano in Rimini in 1465. There he can still be visited under the inscription of 'Themistius Byzantinus'. From the point of view of innovation systems it is interesting to note that Plethon emphasized the need to stimulate and protect Byzantine industry and economy faced with growing Italian competition (Kazhdan 1991, Vol. I, 637).

RIGHTS BECOME DUTIES: THE BIRTH OF THE 'DEVELOPMENTAL STATE'

The New Testament values, freeing Christendom from tribal favouritism and from a revengeful and intervening deity of the Old Testament were – in my humble opinion – transcendental in developing Europe. The Renaissance was also an example of English historian Richard Tawney's assertion that economic development is mainly a result of less religion, not so much what religion (Tawney 1926).²¹ A main protagonist in

²⁰ His enthusiasm for Plato made him change his name to Plethon.

²¹ By this I do not mean the disappearance of religious values and ethics or atheism, I simply refer to the reduced religious fervour which normally accompanies the separation of civic and religious life.

the Renaissance, Plethon – mentioned above – was in favour of bringing back the old Olympian Gods, and the whole imagery of Renaissance art profusely reflects this vision. The best and most representative paintings are probably those of Sandro Botticelli (c.1445–1510), whose *Primavera* and *The Birth of Venus* exemplify the richness brought about by pagan imagery. In other cultural areas civic humanism came to overshadow strictly religious humanism.

A second tectonic religious shift – following that of the New Testament – is represented by the counterpoint between Girolamo Savonarola (1452–1498) and his Counter-Reformation (Weinstein 2011) and the Reformation of Martin Luther (1483–1546). Savonarola wanted the old intervening deity reinstated, and to his Bonfires of the Vanities, essentially directed against non-religious culture in most forms, reportedly even Sandro Botticelli brought one of his own paintings to be burned.²² For a new assessment of the economic views of Martin Luther see the annotated English translation of his 1524 *Trade and Usury* (Luther 2015). In his writings on Savonarola, German historian Leopold von Ranke (1795–1886) contrasted the two as follows: ‘One of Luther’s largest accomplishments for the later development of the world lies in the distinction between civic and religious life. Savonarola wanted to make the connection between the two even closer than they already were’ (Ranke 2013 [1833]).

The Counter-Reformation in Italy brought economic development northwards. As the pillaging of Rome (1527) and the Counter-Reformation extinguished the developmental furore in Italy, the ideas had already moved north. As in Italy so in Germany learned societies sprang up, such as the Donaugesellschaft (Danubiana) in Austria and the Rheinische Gesellschaft (Rhenana) in Germany around 1500. It is important to keep in mind that the 1400s and 1500s were a very cosmopolitan age in Europe, with more foreign students at the main universities, percentagewise, than today. The cosmopolitan nature of the Catholic Church hierarchy also added to mobility and to the transportation of ideas. Giovanni Botero (1544–1617), the early social scientist, to whom I shall return, was born in Piedmont in Italy, but had his first books published in Krakow in Poland and Würzburg and Nürnberg in Germany. But these were also the times of early nationalism.

In Germany the duty-based system that I have described above – the permission to invent that was converted into a duty to invent – took on a particular political flavour. The rulers’ divine right to rule became their divine duty to develop the state they ruled. In Germany this becomes very clear with Veit Ludwig von Seckendorff (1626–1692) and his *Teutsche Fürstenstaat*, first published in 1656. Seckendorff adds a strong dose of duty to the right of the ruler: ‘Right becomes Duty, the lord of the land becomes the first servant of the state’ (Lüdtke 1939, 67). The context of Seckendorff’s writings is significant. He was of the generation born during the Thirty Years War (1618–1648), which devastated large parts of Germany. In some areas up to 70 per cent of the civilian population perished, and there was a feeling that a huge effort was needed – among other things, stopping religious wars – in order to save civilization itself. Philip von Hörnigk (1638–1712), to whom we shall return in Reinert and Rössner’s Chapter 3 in this volume, wrote his bestselling book on Austrian economic policy during the years when the Turks were besieging Vienna. This book remained in print continuously for 100 years from 1684

²² This is recently discussed in Sebregondi and Parks (2011).

to 1784, passing through 18 editions. The external and internal pressures helped to forge the new thinking, inspired from the South, in Northern Europe.

Being a 'Philosopher-King' became the prestigious goal of Northern European royalty (Wolff 1750). The connection to the prestige attached to the Byzantine philosophers at the Italian courts a century or two earlier is easy to see. Knowledge provided the King with prestige, and making the subordinates wealthy and knowledgeable added to this prestige. To this was added an admiration of the Chinese, their inventions and their high population density. Being able to feed a large population was an obvious sign of both economic success and good rule. Thus Mankind's energies could be channelled from warfare into something more constructive: building the nation.²³ However, the competitive elements remained between the states, but no longer just in warfare. This diversity of states competing on different levels has been used as an argument to explain why Europe overtook China, which was ahead in terms of inventions and government not too long before (Reinert and Xu 2013).

This was the starting point of what Albert Hirschman has called 'a multi-level conspiracy for development'. Wilhelm Roscher, the German economist of the Historical School, was to call this type of government 'enlightened despotism' (Roscher 1868, 76–106). It is interesting to observe how the economists at the time encouraged, flattered and cajoled their rulers into adopting the right kind of economic policy. Many of them were at the same time researchers in the most diverse subjects, teachers, government advisors, business entrepreneurs on behalf of the state and the rulers, and a one-man research council (Reinert 2009).

FROM EXPLORATIONS, TERRESTRIAL AND CELESTIAL, TO INNOVATIONS

From the advent of clocks that gave time its metric measurability and inevitability, through the astronomers who shattered Man's mental prison, to the sailors who domesticated the oceans and seaways, the period around the turn of the sixteenth century is remarkable in the synergy we can observe between innovations and explorations, between men of theory and men of practice, in reshaping the European worldview. Men of theory and practice joined forces to weave a new European cosmology. The Late Renaissance historian William J. Bouwsma explored what he named the 'liberation' of a number of key concepts around the turn of the sixteenth century (Bouwsma 2000). As the static medieval worldview digested the process of new scientific breakthroughs, of geographical and scientific exploration, it was forced to broaden its horizons and accept, perhaps more than adopt, a more dynamic mentality. I would argue, on the basis of my previous qualifications, that the emancipation of two of Bouwsma's axioms – time and space – fertilized the European worldview, making innovations acceptable and liberating growth and economic progress in theory as well as practice.

Something was slowly changed around the turning of the sixteenth century. Giovanni Botero and Antonio Serra – the economists of this account – testify to the gradual

²³ This is the core of Hirschman (1977).

nature of the epistemic shift. Worldviews do not change overnight, but rather cumulatively evolve on a level of time at once dependent on and detached from that of the 'event' (Braudel 1982, 26–52; Kuhn 1970, 151). Giovanni Botero (1544–1617) wrote two immensely influential books: *The Causes of the Greatnesse of Cities* (Botero 1589, first published 1588) a book on economics and statecraft, and *Relazioni Universali* (Botero 1599, first published 1591), a book on world geography, ethnography and explorations. Botero's works were indeed a strong indicator of changing times, but alone he was, of course, not enough to trigger the drastic change that took place.²⁴

Botero (1589) warns, in a chapter on how to acquire the wealth of others, that 'to attract to oneself and acquire just possession of what belongs to another requires no less skill and judgment than to propagate what is one's own' (Botero 1589, 157). One could, in Botero's model of the economy, produce and propagate wealth, and the Prometheus of economic growth was thus unbound from his scholastic shackles. By removing the limits of growth, as well as some of its more restrictive moral barriers, Botero effectively expanded the limits of human endeavour, fusing a Heraclitean cosmology with economics (Sombart 1929; Popper 1957, 112–113). The economy went from static to dynamic, from a zero-sum game to a dynamic positive-sum game. The difference between the static and dynamic conceptions of reality can be traced back to Ancient Greece: Scholastic and modern mainstream economists follow Zeno's belief in a reality at once static and dynamic, whereas mercantilists and modern evolutionists adhere to the qualitatively changing world of Heraclitus. Karl Popper points out the semantic paradox resulting from this dichotomy: 'For the kind of society which the sociologists call "static" is precisely analogous to those physical systems which the physicists would call "dynamic" (although stationary)' (Popper 1957, 112–113).

Newtonian physics would consider the solar system 'dynamic', insofar as it contains motion and change; whereas social scientists would call it 'static' since, apart from rare celestial phenomena that also can be explained within the framework of the model, it never undergoes structural change. There is no 'novelty', no 'innovation'.

Botero's insight was to translate into economic terms Giordano Bruno's (1548–1600) 1584 *De l'infinito universo e mondi*, a text considered heretical by ecclesiastical authorities that contributed considerably to the eventual calling of an *auto-da-fé* against him. Bruno reinterpreted the ideas of Lucretius' (c.99–55 BC) *De rerum natura* in the terms of Nicolas of Cusa (1401–1464) and Copernicus (1473–1543) (Koyré 1957, 18, 25, *passim*).

ECONOMIC DEVELOPMENT AND RELIGION: A NOTE ON MAX WEBER AND HIS DISCONTENTS

As explained, the system we call capitalism – which formed the foundation of modern economic development – took shape in competing Italian city-states from the twelfth century onwards. There were several contenders. Siena, artistically represented by Ambrogio Lorenzelli's mural *Good and Bad Government* from 1338–1339, had a head start. Genova played an important role in the early development of banking. So did Venice, which

²⁴ For a further discussion of Botero's works see Reinert and Carpenter (2016).

also pioneered a republican form of government which was to last for more than a millennium (from around AD 800). The early capitalist system probably reached its zenith during the Florentine Renaissance of the 1400s. At the time in Florence a small group of individuals left their intellectual footprint on history: universal genius Leonardo da Vinci (1452–1519), painter and sculptor Michelangelo Buonaroti (1475–1564), painter Sandro Botticelli (c.1445–1510) and Filippo Brunelleschi (1377–1464), the architect of the cathedral in Florence. Indeed this *magna facere*, doing great and beautiful things, came to be a key feature of the Renaissance: what great rulers, such as Lorenzo il Magnifico of Florence (1449–1492), promoted. Luca Pacioli (c.1447–1517), a collaborator of Leonardo, perfected the system of double-entry bookkeeping which made it possible for capitalists to determine how much capital they actually had.

How does this flair for greatness fit Max Weber's *Protestant Ethic and the Spirit of Capitalism* (1904/1905, 1920), a book 'in which he proposed that ascetic Protestantism was one of the major "elective affinities" associated with the rise in the Western world of market-driven capitalism and the rational-legal nation-state' (which is Wikipedia's on-liner on Weber's book)? Furthermore, how could the birth of capitalism start around 1200, while Protestantism, in the form of Lutheranism (Martin Luther, 1483–1436) and of Calvinism (Jean Calvin, 1509–1564), was born centuries later? Weber's story of Protestantism being at the root of capitalism has become a dominant narrative in its field in a similar way that Adam Smith has in the broader field of economics. I find it useful to bring back other perspectives.

In fact Weber's thesis was the product of an intense rivalry between two young German social scientists, one a year older than the other, whose fathers (Anton Sombart, 1816–1868, and Max Weber senior, 1836–1897) were both members of the German Parliament for the National-Liberal Party: Werner Sombart (1863–1941) and Max Weber (1864–1920). The fact that this was a fight apparently won by Weber does not mean that some of Sombart's points as regards economics and religion do not merit being brought back into the discussion. One reason is that Sombart's explanation of the origin of the system solves the problem of capitalism being born centuries before Protestantism.

Capitalism, as it came to develop, contains both ascetic values and conspicuous spending, personal spending on luxuries and state spending on wars. Thrift and parsimony without accompanying spending would have choked capitalism in underconsumption. In a 1957 book (Samuelsson 1964 [1957], 63–64) Swedish economic historian Kurt Samuelsson (1921–2005) makes a strong case against Weber's thesis, arguing – with Werner Sombart – that values that Weber sees as appearing only with Protestantism and Puritanism, with Benjamin Franklin, were in fact present already during the Renaissance:

As a debating point against Weber, Sombart drew attention in *Der Bourgeois* to the Renaissance writer Leon Battista Alberti, who in 1450 discussed the principles of 'holy housekeeping,' in a work whose general approach to diligence and thrift as economic virtues and to the 'rationalization' of human activity as a whole would have given Franklin himself no ground for objection.

Weber took up Sombart's criticism on this point in a note four pages long. He hunts zealously for points of difference between Franklin and Alberti. Minor variations of phraseology, such as the fact that Alberti speaks of the management of wealth while Franklin refers to the employment of capital, are inflated to major importance even though two different languages and a time-gap of 300 years are involved. (Samuelsson 1964 [1957], 63–64)

The debate between the two young German academics on the role of religion in capitalism decayed into a decidedly unproductive quarrel. ‘Weber’s retaliatory note abounds with sophistries, distortions and circular arguments’, Samuelson concludes.

Kurt Samuelsson uses the Dutch Republic, Europe’s richest nation during its Golden Age – roughly spanning the seventeenth century – to show how successful capitalists there could be Catholics as well as Protestants. Indeed the Dutch Republic in this period seems to show both that thrift and luxury, for example in art, went hand in hand, and that (as previously referred) economic growth and development appear to increase when religious fervour – regardless of religion – diminishes.

GIOVANNI BOTERO

It is probably fair to say that early economic theory grew out of two much older and overlapping traditions:

1. The tradition of Xenophon’s *Poroi*, a literary tradition later generally labelled *Hausväterliteratur* (it tends to be discussed in the German language), giving advice on how to run estates, small and large.²⁵ The *Fürstenspiegel* (‘Kings’ Mirror’) literature, bringing advice to the rulers on how to govern, can be seen as part of this broader tradition. The *Sachsenspiegel*, from German Saxony, about 1230, is the best known, but even in peripheral Norway, this tradition goes back to a text from around 1250: *Konungs skuggsjá* (Old Norse for ‘King’s mirror’).
2. The tradition of accurate country surveys and descriptions, dating back to *De magnalibus urbis mediolani* of Bonvesin de la Riva (1288) and later works also on the Florentine state. Such descriptive surveys were the purpose of costly and extensive *visitas* in the Spanish provinces of the New World, some of which have been republished (Ortiz de Zúñiga, Iñigo 1967/1972).

Two apparently different economic traditions – cameralism and mercantilism – seem to have grown out of the extremely widely diffused works of Giovanni Botero (1544–1617) (Firpo 1971; Descendre 2009) as a common platform and point of reference. Botero’s work *Ragion di Stato* (Firpo 1975, 139–164) satisfied the *Fürstenspiegel* tradition, while his *Relazioni Universali* (1591) satisfied the need for surveys and the fact-finding missions’ quest for geographical, cultural and anthropological knowledge. All in all, at the time when the knowledge of the whole world and its cultures became codifiable, Giovanni Botero provided an unusually complete range of social sciences. It is worth noting that in contrast to the many utopias of the period, Botero’s reasoning was based on the observation of history and of facts.²⁶ In his work he clearly distances himself from

²⁵ On the *Hausväterliteratur* as an alternative type of economic theory, originating on the European continent, see the interesting discussion in Burkhardt and Priddat (2000).

²⁶ Of course Botero made mistakes, such as when his sources were not correct. The remarkable thing, however, is the acuteness of his analysis of generalized wealth and policy prescriptions that came to typify the centuries of economics that go under the name of cameralism and mercantilism. Botero was involved in the process of making the Vatican’s list of prohibited books, which in Botero’s days also comprised the works of Jean Bodin (1530–1596). This position clearly gave him access to much new material.

‘bullionism’ – the idea that a nation’s wealth consists in the amount of precious metals owned – of which mercantilism is sometimes accused.

Botero was born in the small town of Bene Vagienna in the province of Cuneo in the Italian Piedmont region. As a Jesuit, he was keenly interested in non-European cultures.²⁷ From the point of view of now long-standing Western Eurocentrism, the ability of the Jesuits to engage in two-way cultural communication reminds us that Eurocentrism is not necessarily a ‘natural’ state of affairs. Jesuit Matteo Ricci (1552–1610), a contemporary of Botero, ventured with a small group to China, where he translated not only Christian and Western scientific texts into Chinese, but also Chinese texts into Latin (Spence 1983). By entering inside foreign cultures – from the Chinese to the Guaraní in South America – Jesuit travellers also played the role of anthropologists. As one observer says, Botero ‘brought together an immense mass of geographical and anthropological information, which he tried to organize according to broad methodological categories (like “resources”, “government”, and “religion”)’ (Rubies 2000, 294).

Apparently little unites Sir Walter Raleigh (1554–1618), utopian Tommaso Campanella (1568–1639), English economist Edward Misselden (1608–1654), Spanish economist Gerónimo de Uztáriz (1670–1732), and Swedish technologist and economist Christopher Polhem (1661–1751). But one thing does: they all convey key insights found originally in Giovanni Botero, but following the practice of the time they do not quote him or anyone else as to the origins of these insights. Clearly the work of the first German bestseller, Veit von Seckendorff (1626–1692) is also very much influenced by Botero (E. Reinert 2005). There are still 30 editions of Botero’s works (mainly uncatalogued) in the Gotha Library that Seckendorff formed for Ernest the Pious (Ernst der Fromme) of Sachsen-Gotha-Altenburg, and Botero was on the reading list Seckendorff made for the education of princes (S. Reinert 2005). The large number of translations of Botero’s works testifies to his strong influence on the European seventeenth century zeitgeist (see Tables 1.1 and 1.2 for a list of editions).

Botero’s small book (3 + 79 pp) *The Cause of the Greatnesse of Cities / Sulla Grandezza delle Città* (first edition 1588) was the first economic bestseller, reaching a record 40 editions before 1850,²⁸ 38 of them between 1588 and 1671. Only one year later, this volume was included in the much larger work *Ragion di Stato* (8 + 368 pp) which in English came to be called *Reason of State* and in German *Staatsräson*. In his 1925 work on *Staatsräson* Meinecke mentions Botero’s many followers and the ‘true catacombs of forgotten literature’ which follow in Botero’s path.²⁹ In Tables 1.1 and 1.2 it is not yet completely clear which editions of *Ragion di Stato* contained *Greatnesse of Cities* and which did not. There is a new translation of Botero’s *The Cause of the Greatnesse of Cities* with an excellent introduction by Geoffrey Symcox (Botero 2012; Symcox 2012).

The understanding that grew out of Botero’s work was that only in barren areas lacking natural resources and with limited possibilities for food production – but in favourable geographical positions such as Venice and in the Dutch Republic – would

²⁷ ‘[T]he very purpose of the group Loyola gathered during his studies in Paris was the apostolate with the Muslims in the Holy Land’ (Maryks 2008).

²⁸ The reference to 1850 in terms of book publications in this chapter is the result of the author’s work on documenting economic books published before that date.

²⁹ ‘*Wahre Katakomben von vergessener Literatur*’ (Meinecke 1925, 83n).

Table 1.1 Giovanni Botero: *Cause della Grandezza delle Città / Della Ragion di Stato*, editions before 1850

	Place	Date
1.	Rome	1588 (only <i>Grandezza</i>)
2.	Rome	1588 (only <i>Grandezza</i> + historical piece on Rome)
3.	Venice	1589 (1st edition of <i>Ragion di Stato</i> , also including <i>Grandezza</i>)
4.	Ferrara	1589 (hereafter, both works are included unless otherwise indicated)
5.	Rome	1590
6.	Madrid	1593 (Spanish)
7.	Milan	1596 (only <i>Grandezza</i> , publisher Pacifico Ponzio)
8.	Milan	1596 (only <i>Grandezza</i> , publisher S. Barberino)
9.	Turin	1596
10.	Milan	1596
11.	Milan	1597–98 (<i>Ragione</i> 1597, <i>Cause</i> 1598)
12.	Venice	1598
13.	Pavia	1598 (without <i>Cause</i>)
14.	Venice	1598 (without <i>Cause</i>)
15.	Paris	1599 (French, without <i>Cause</i>)
16.	Barcelona	1599 (Spanish, without <i>Cause</i>)
17.	Venice	1601
18.	Ursellis/Oberursel	1602 (Latin)
19.	Strasbourg	1602 (Latin)
20.	Burgos	1602 (Spanish, without <i>Cause</i>)
21.	Burgos	1603 (Spanish, without <i>Cause</i>)
22.	Barcelona	1605 (Italian + <i>Relazioni</i>)
23.	London	1606 (English, only <i>Grandezza</i>)
24.	Burgos	1606 (Spanish, without <i>Cause</i>)
25.	Turin	1606 26.
26.	Paris	1606 (French, <i>Maximes d'estat militaires et politiques</i> . . .)
27.	Venice	1606
28.	Venice	1608 (+ <i>Relazioni</i>)
29.	Milan	1609
30.	Bologna	1609
31.	Turin	1610
32.	Cologne	1613 (Latin)
33.	Cologne	1615 (Latin)
34.	Venice	1619
35.	Venice	1619
36.	London	1635 (English, only <i>Grandezza</i>)
37.	Venice	1640 (+ <i>Relazioni</i>)
38.	Frankfurt	1657 (German)
39.	Venice	1659 (+ <i>Relazioni</i>)
40.	Venice	1659
41.	Frankfurt	1661 (1664?) (German)
42.	Helmstedt, Germany	1666 (Latin)
43.	Venice	1671 (+ <i>Relazioni</i>)
44.	Milan	1830
45.	Milan	1839

Table 1.2 *Giovanni Botero: Relazioni Universali, editions before 1850*

Place	Date
1. Rome	1591
2. Rome	1592–93
3. Ferrara	1592
4. Bergamo	1594–96
5. Rome	1595
6. Rome	1595
7. Venice	1595
8. Vicenza	1595 publisher G. Greco
9. Vicenza	1595 publisher Eredi di Perin libraio
10. Brescia	1595–96
11. Rome	1596
12. Bergamo	1596
13. Venice	1596 publisher G. Vincenti
14. Venice	1596 publisher G.B. Vssio
15. Venice	1596 publisher G. Angelieri
16. Bergamo	1596
17. Venice	1596
18. Cologne	1596 German, publisher J. Gymnici Erben
19. Cologne	1596 Latin, publisher C. Andree
20. Manuscript in British Museum, London	1596 German
21. Venice	1597
22. Vicenza	1597
23. Rome	1597
24. Venice	1597
25. Frankfurt	1598 Latin
26. Brescia	1598
27. Venice	1598
28. Cologne	1598 Latin
29. Brescia	1599
30. Venice	1599
31. Venice	1599
32. Cologne	1599 German
33. Valladolid	1599 Spanish
34. Venice	1600
35. Lübeck	1600 Latin
36. Turin	1601
37. London	1601 English
38. Venice	1602
39. Ursellis/Oberursel	1602 German
40. Ursellis/Oberursel	1603 Latin
41. Barcelona	1603 Spanish
42. Venice	1605
43. Barcelona	1605 Spanish
44. Turin	1607
45. Venice	1608 publisher A. Angelieri

Table 1.2 (continued)

Place	Date
46. Venice	1608 publisher G. Bertano
47. Barcelona	1608 Spanish
48. Valladolid	1609 Spanish
49. London	1611 English
50. Venice	1611
51. Munich	1611 German
52. Munich	1611 German
53. Venice	1612
54. Cologne	1613 Latin
55. Krakow	1613 Polish
56. Frankfurt	1614 Latin
57. Venice	1618
58. Marburg	1620 Latin
59. Helmstedt	1620 Latin
60. Gerona	1622 Spanish
61. Venice	1622
62. Leyden	1625 Latin
63. Leyden	1626 Latin
64. Leyden	1627 Latin
65. Leyden	1629 Latin
66. London	1630 English
67. Leyden	1633 Latin
68. Venice	1640
69. Venice	1640
70. Leyden	1642 Latin
71. Leyden	1642 Latin
72. Leyden	1647 Latin
73. Jena	1648 Latin, translated from German
74. Venice	1650
75. Venice	1659
76. Venice	1662
77. Helmstedt	1664 Latin
78. Leipzig	1667 Latin
79. Bologna	1668
80. Helmstedt	1670 Latin
81. Venice	1671
82. Gerona	1748 Spanish
83. Venice	1795
84. Venice	1796

Note: Not all editions are complete. Except for corrections in chronology, I have followed the entries by Assandra (1926/1928). In contrast to Botero's *Grandezze*, this book was prohibited in France, which explains the lack of French translations. Publishers are indicated only when the editions of the same year in the same city were by different publishers.

economic development tend to come ‘naturally’. In virtually all countries heavy-handed government policies were required during the transition from diminishing returns activities (agriculture) to increasing returns activities (manufacturing), as they were identified by Serra (1613); or from ‘natural activities’ to ‘artificial activities’, using the terminology of Thomas Mun (1664). This was the essence of the thinking that Botero’s influence turned into the economic mainstream at the time. What Venice and the Dutch Republic – rather than the policies of Venice and the Dutch Republic – had achieved was the object of attention of foreign economists and foreign rulers alike.

The theoretical conflict between the forefathers of today’s mainstream canon and what we could call the Renaissance canon has existed at least since the 1622–1623 ‘English’ debate between Gerard de Malynes (Malynes 1622, 1623) and Edward Misselden (Misselden 1622, 1623), where Malynes represented a static theory rooted in barter and Misselden represented a theory centred around learning and production. In the history of economic thought, their debate is interpreted as being about exchange controls and the balance of trade.³⁰ The controversy between the two was an ‘acrimonious, even abusive’ one, in which ‘ink was shed like water’ (Buck 1942, 23).

However, by going back to the sources, one finds that the main line of attack by Misselden against Malynes is his ‘mechanical’ view of Man: Malynes has left out Man’s ‘art’ and ‘soul’. Misselden quotes at length a paragraph from Malynes, where Malynes reduces trade to three elements, ‘namely, Commodities, Money, and Exchange’ (Misselden 1623, 8). Objecting to this definition, Misselden says: ‘It is against Art to dispute with a man that denyeth the *Principles* of Art’. Misselden scorns Malynes for not seeing the difference between a heap of stones and logs and a house; because Man’s productive powers and his soul, which produce the house, have been left out. Typically, the wealth of a nation was seen as lying in its capacity to produce, its ‘productive powers’ as Friedrich List put it.

The importance of the difference between heaps of stones and logs and a house rings a bell when reading Botero, the first English translation of which was in 1605:

some will aske me; whether Fertilitie of Land, or Industrie of Man, importeth more to make a place Great, or populous? Industrie, assuredly. First because Manufactures framed by the skilfull hand of Man, are more in number,³¹ and price,³² than things produced by Nature: For Nature giveth matter, and subject: but the Curiositie and Art of Man addeth unspeakable varietie of formes. Wool, from Nature, is a rude and simple Commodity: What fair things, how various, and infinite, doth Art make out of it?³³

Compare the Marbles, with the Statues, Colossuses, Columns, Borders, and infinite other Labours, taken. Compare the Timber, with the Gallies, Galleons, Vessels of many sorts, both of Warre, Burthen, and Pleasure: Compare also the Timber, with the Statues, the Furnitures for Building, and other things innumerable, which are built with the Plane, Chesill, and Turners-Whee. Compare the Colours with the Pictures . . . [etc.]. (Botero 1635, 88–89)

³⁰ Schumpeter discusses the controversy between the two men (Schumpeter 1954, 344–345). See also their respective entries in *The New Palgrave*. In all cases these references are purely to the mechanics of money and exchange.

³¹ That is, greater diversity of products.

³² This could be interpreted as meaning more imperfect competition due to higher barriers to entry.

³³ The second English translation is clearer on this and is used here (Botero 1635, 85–86).

Botero's distinction between raw materials and the finished goods which are created by the arts certainly recalls Thorstein Veblen's insistence on the instinct of workmanship, rather than Adam Smith's barter instinct, as the origin of wealth. Misselden represents the acute Renaissance awareness of the vast territory to be covered between Mankind's present poverty and ignorance, and the enormous potential. Realizing this potential released enthusiasm and energy. The situation recalls Keynes's frustration with the sub-optimal situation of the world under the Great Depression. Both the Renaissance philosophers and economists and Keynes were searching for the formula needed to liberate society from its obviously less than optimal position at the time. It recalls what Keynes called 'Salvation through Knowledge'. This attitude is very different from Man as the passive victim of 'two sovereign masters, pain and pleasure' (Bentham 1780, Ch. I, 11), which is the philosophical foundation of English classical economics and implicitly also of modern neoclassical economics.

In England, Sir Walter Raleigh was also studying Botero's treatise. His 'Observations Concerning the Causes of the Magnificency and Opulence of Cities' is a precis of Botero's text (Raleigh 1751, Vol. 2, 321–329). For example, Raleigh's final section, 'The Causes That Concern the Magnificency of a City', closely follows Botero's translation of the conclusion to Book III of 'On the Causes'. Raleigh's interest in 'On the Causes' seems to be linked to his colonial projects. Echoing Botero's conception of a civilizing process in which cities were instrumental (Book I, Ch. 2), Raleigh's opening statement alludes to the need to 'civilize and reform the savage and barbarous lives and corrupt manners of such People', presumably the American Indians.³⁴ Recognizing the 'uncivilized' nature of most non-European cultures could lead to a desire to protect them, as in the policy of Botero and also the official policy of the Spanish monarchy towards the Indians. It could also lead to a desire to colonize and exploit them as cheap labour. It is also likely that William Petty (1623–1687), who entered a Jesuit college in Caen in France at the age of 14, would have been exposed to Botero, whose ideas were very much in fashion at the time.

The Spanish mercantilist Geronimo de Uztáriz (1670–1732), whose main work was translated into both French and English, commented from a particularly good vantage point, being a Spaniard and having lived in Holland and Italy for 23 years. Uztáriz's conclusion reflects Botero's line on the role of manufactures and the sterility of gold per se: '[Manufactures] is a mine more fruitful of gain, riches, and plenty, than those of Potosí'.³⁵

The text below, from an economics student in Uppsala in 1747, sums up the mercantilist argument with emphasis on population density. We find the same much earlier argument in William Petty, who developed it into a policy recommendation: move the population from sparsely populated areas in the periphery of the realm to London, where they are more useful. This also reflects the policies of the Jesuits in Latin America, where the native populations were brought into city-like *reducciones*. The author, Gustav Westbeck, was a student of Anders Berch in Uppsala:

³⁴ The discussion of Botero and Raleigh is based on Symcox in Botero (2012, xiv).

³⁵ Potosí, at about 4000 metres above sea-level in present-day Bolivia, was the richest of all mines in the world. At the time, it was the probably the largest city in the Americas (with a population of around 150 000 in the mid-1600s, it was about double the size of Lima).

How things really are in national economics, is nowhere clearer than in the case of the United Netherlands. They have virtually no domestic [resources], but still, through the industry of its large population, exceed in strength the immense but sparsely populated and idle Spain. [The Netherlands] knows well how to use the folly of others to its own benefit. We see how poor Spain is with all its gold and silver mines, the best ports and the best soil in the world, because of its lack of inhabitants. On the other hand how its large number of inhabitants make the United Provinces mighty, with their miserable ports and the worst climate on earth. (Westbeck 1747, 4–5)

The explosive spread of Botero's *Grandezza delle Città* is shown in Table 1.1. Counting Strasbourg – where Seckendoff had studied – as Germany, there were four editions of the work published in Germany before the start of the Thirty Years War. The others were one in Ursellis/Oberursel (near Frankfurt) and two in Cologne. All were in Latin. The first German translation appeared in Frankfurt in 1657. It is interesting to note how the editions grew fewer during the war, all over Europe, and how the frequency picked up again afterwards.

Table 1.1 includes all editions found so far of *Cause della Grandezza delle Città* (first edition Rome 1588), all editions of *Della Ration di Stato* (first edition Venice 1589), and all editions of *Relazioni Universali* (first edition Rome 1591) when they are bound with *Ration di Stato*.

Table 1.2 lists 83 independent editions of the *Relazioni Universali* between 1591 and 1796 (there were no editions between 1796 and 1850). The *Relazioni Universali* was published in Italian (from 1591), German (first two editions Cologne 1596), Latin (first two editions in Frankfurt and Cologne 1598), English (first in London 1601), Spanish (first in Valladolid 1599), and Polish (first in Krakow 1613). Botero's bibliographer Assandra (Assandra 1926, 407–442; 1928, 29–63, 307–351) informs us that the *Relazioni* was a prohibited book in France. In terms of the number of editions of his books, Botero comes out favourably compared to Adam Smith, whose 1776 *Wealth of Nations* – in an immensely more literate period than the 1600s – reached 94 editions before 1850 (data from Bullock 1939).

ANTONIO SERRA

From what little we know of it, Antonio Serra's life comes across as a stark contrast to that of Giovanni Botero.³⁶ We have no details of his date of birth or life, but we know from the title page of his book that Antonio Serra was born in Cosenza in Southern Italy. Cosenza is an old settlement dating back to Roman times, and was also the birthplace of the philosopher Bernardino Telesio (1509–1588), upon whom Francis Bacon bestowed the title 'the first of the moderns'. What else we know is that, while in a jail in Naples, Serra wrote a *Brief Treatise*,³⁷ a book of such rarity that only about six copies are known to exist today, and that he died in jail a few years later. While Botero experienced fame and saw a large number of editions and translations appear during his lifetime, Serra

³⁶ On Serra see also Patalano and S. Reinert (2016); some of the material in this section is from my chapter in this volume, E. Reinert (2016).

³⁷ For the first English translation, see Serra (2011).

died completely unrecognized under squalid conditions in a jail in Naples. He informed his readers that the next book he planned to write would bear the title *On the Power of Ignorance*, but he never wrote it.

Some 350 years later, however, Joseph Schumpeter gave Antonio Serra the honour of having been ‘the first to compose a scientific treatise . . . on economic principles and policy’ (Schumpeter 1954, 195). Schumpeter’s succinct description of Serra’s work confirms the author’s anti-bullionist bias, the normal criticism against mercantilists:

Its chief merit does not consist in his having explained the outflow of gold and silver from the Neapolitan Kingdom by the state of the balance of payments but in the fact that he did not stop there but went on to explain the latter by a general analysis of the conditions that determine the state of an economic organism. Essentially, the treatise is about the factors on which depend the abundance not of money but of *commodities* – natural resources, quality of the people, the development of industry and trade, the efficiency of government – the implication being that if the economic process as a whole functions properly, the monetary element will take care of itself and not require any specific therapy.³⁸

Giovanni Botero and Antonio Serra represent the start of an economic tradition that became a key building block for the type of economic theory which built the Europe that soon would take over world economic leadership from China.³⁹ The modern world as we know it, in short, emerged from the sort of economic ideas and policies Serra represented. His conscious focus on the real economy as opposed to the financial economy can be seen as a continuation of an anti-hoarding tradition that leads back to the Bible, but his emphasis on increasing returns and a large diversity of economic activities was entirely new.

Regardless whether this long theoretical tradition which dominated Europe until the late eighteenth century be labelled mercantilist, Colbertist or cameralist, Botero’s narratives and Serra’s theories in a sense laid the foundations for all three schools by establishing two crucial dichotomies in economics. The taxonomies Serra established are important for understanding the wealth and poverty of nations, and indeed provide a continuing key to what his contemporaries called *buon governo*, or ‘good government’.

US historian Richard Goldthwaite shows the historical importance of the dichotomy between raw materials and manufacturing: what is generally seen as Europe’s ‘commercial revolution’, Goldthwaite argues, was in fact a process of import substitution. Manufactured goods, that had previously been imported from the Levant, started to be produced in Europe itself from the twelfth century onwards (Goldthwaite 2009, 6–8). As is often observed, practice is born before theory.

Serra’s two dichotomies, I will argue, were in the recent past still part and parcel of all three dominant ideologies and their economic policies in the 1930s,⁴⁰ but were subsequently lost with the formalization of modern neoclassical economics, and are conspicuously absent in the rather superficial discussion of good governance presented by the Washington institutions today.

The first is a dichotomy separating economic activities subject to increasing returns

³⁸ Schumpeter (1954, 195). Note the term ‘economic organism’, which indicates a type of economic theory based on biological metaphors, rather than on metaphors from physics as is present-day theory.

³⁹ For data see Bolt and van Zanden (2014, 627–651).

⁴⁰ I am here referring to communism, fascism and Roosevelt’s New Deal.

from those subject to diminishing returns. Putting ‘manufacturing’ in another category than ‘raw materials’ from the point of view of policy-making had already been the core element of the English Tudor strategy from 1485, promoting woollen manufactures at the expense of the export of raw wool by slowly building up the export duties of raw wool.⁴¹ There had been scattered references to the wisdom of such practices,⁴² but what Giovanni Botero did in his volumes was to elaborate the vision of the role of manufacturing, the insight that civilization was based on adding knowledge and value to Nature’s raw material, into a full-fledged theory of economic development.

In Botero’s volume the degree of economic and societal development manifested itself as the ability of a city to hold the maximum number of inhabitants in satisfactory conditions. This again was the result of the number of different professions that were exercised in the city: in other words, the degree of division of labour – the degree of complexity – would determine the wealth of a city.⁴³ Botero explained the mechanisms, but Serra’s big contribution to this was to explain why. He did so by highlighting the key difference between the production of raw materials and manufactured goods, that is, what happens to the development of costs as production is increased. In manufacturing there were increasing returns, and the synergies of the multitude of artisanal and manufacturing activities, each of them subject to increasing returns, produced the linkages and cumulative causations that Botero and Serra saw as being the main factor which attracted so many people to the city-states that had specialized in manufacturing.

In the first edition of his *Principles of Economics* Alfred Marshall, the founder of neoclassical economics, emphasizes the crucial importance of diminishing returns: ‘The tendency to a Diminishing Return was the cause of Abraham’s parting from Lot,⁴⁴ and of most of the migrations of which history tells’ (Marshall 1890, 201). Today the migration experienced in Europe is from nations dominated by diminishing returns activities (for example, Eritrea) to nations where increasing returns activities dominate (for example, Holland).

The second dichotomy is that separating the financial sector from the real economy. As already mentioned, this dichotomy is of course much older than Serra’s work. An academic expression of the problems which may arise when the financial and monetary spheres decouple hails back at least to Nicolaus Oresme (c.1320–1382).⁴⁵ This dichotomy is not there in Botero’s *Greatness of Cities* – which concentrates on the real economy – but it is very much there in Antonio Serra’s discussion with his contemporary MarcAntonio de Santis on how to deal with the outflow of money from the Kingdom.⁴⁶ De Santis was of the opinion that the lack of money in the Kingdom was due to the excessively high level of the exchange rate. On the basis of his theory several measures had been introduced to manage the rate of exchange and limit the export of metallic money, without positive results. Serra, on the other hand, starts by noting that there are countries with

⁴¹ For a thorough discussion see Reinert (2007).

⁴² Luis Ortiz’s 1558 memorandum to King Philip II of Spain is a famous example.

⁴³ This argument is being rediscovered; see Hausmann and Hidalgo (2014).

⁴⁴ Marshall’s footnote here: ‘“The land was not able to bear them that they might dwell together; for their substance was great so that they could not dwell together”. Genesis xiii. 6.’

⁴⁵ Nicolas Oresme (1356), *De Moneta*. For a recent discussion see Schefold et al. (1995).

⁴⁶ This was a problem of the whole of Spain, not only in the Spanish Viceroyalty of Naples where the discussions between Serra and de Santis took place.

no natural supplies of metals from domestic mines that nevertheless manage to have an abundance of money. In other words, Serra asks: why on earth do the gold and silver which flow into Spain from the New World end up accumulating in places like Venice, which have no mines and raw materials at all?

Serra's reply was based on Botero's analysis of what attracted people and resources to some cities and not to others, above all the abundance of different manufacturing industries. In other words the solution to the problems posed by dichotomy two – the conflict between the financial and the real economy – lies in observing the insights emanating from dichotomy one: money will leave the cities and countries with no increasing returns activities, being attracted to cities with manufacturing and increasing returns. In Schumpeter's quote above he emphasizes Serra putting the real economy at centre stage: 'if the economic process as a whole functions properly, the monetary element will take care of itself and not require any specific therapy' (Schumpeter 1954, 195).

In fact, digging deeper into Serra's arguments, we can argue with him that de Santis's fiddling with monetary variables – as long as these monetary variables did not positively affect the health of the real economy – were not only completely in vain, but potentially destructive to the real economy. The present tragedy of Greece inside the European Union carries with it the same type of discussion as that between Messrs de Santis and Serra more than 400 years ago.

The jury is still out on whether the policies carried out from the start of the financial crisis until the present (2016) by the Federal Reserve – and even more so those of Mario Draghi and the European Central Bank – again will justify Antonio Serra's warning: fiddling around with financial variables, which in reality do not improve conditions in the real economy, will not help, but will probably worsen the situation. Schumpeter saw the need for economic 'cold showers' provided by financial crises, because unproductive capital lost its value and the system was reset with a clean slate. From that point of view we can ask whether Draghi, by providing more liquidity and more debt, presently prevents Europe from taking the necessary 'shower', cleansing itself from a huge debt overhang and kick-starting the real economy. Increasing debt and demand contraction in vicious circles – as a result of policies of austerity – seem to prevent the virtuous circles that originate in Serra's increasing returns to scale (that is, falling unit costs as the volume of production increases).

I shall also briefly discuss how Serra's distinction between increasing and diminishing returns is crucial to an understanding of technology optimism and technology pessimism, looking at the situations where 'limits to growth' may be converted into 'green sustainability'. Based on Serra's insights about increasing returns it is perfectly possible to have intensive growth, that is, growth in incomes without a corresponding growth in resource throughput. This is what is meant, in fact, by increasing returns: getting more out of what is put in. So capturing increasing returns means, essentially, embarking on a process of intensive growth, which, if based on renewable energies and resource recirculation, can accurately be called 'green growth'. Employing Serra's theory today, in the energy sector green growth would mean going from a system of extracting fossil fuel to a system of harvesting nature's energy.⁴⁷

⁴⁷ This possibility, outlined in Mathews and Reinert (2014) will be discussed later in this chapter.

Serra's Key Dichotomy: Increasing versus Diminishing Returns and its Crucial Importance as the Determining Factor of Wealth and Poverty

As my son Sophus A. Reinert has argued (in Serra 2011), Antonio Serra's treatise could be read as an extended meditation on one of Giovanni Botero's most crucial passages. In his *Ragion di stato*, Botero wrote:

such is the power of industry that no mine of silver or gold in New Spain or Peru can compare with it, and the duties from the merchandise of Milan are worth more to the Catholic King than the mines of Potosí and Jalisco. Italy is a country in which . . . there is no important gold or silver mine, and so is France: yet both countries are rich in money and treasure thanks to industry.⁴⁸

Throughout his work Botero argues for the superiority of industry in terms of what we would call synergies from a diversity of economic activities, in terms of the greater possibility of innovation in city activities, and in terms of their ability to yield a larger profit than countryside activities. His observations were certainly shared by any experienced traveller in Europe at the time, but Botero fails to provide a convincing theoretical argument for why this is so. What are the qualitative differences between city activities and countryside activities? Explaining this is Antonio Serra's greatest contribution to economics, and one of the reasons Joseph Schumpeter argued that his work amounted to the earliest scientific treatise on economic principles and policy (Schumpeter 1954, 194–195).

Serra wrote in Naples, a poor city with a lack of food and occasional food riots; a particularly violent one had taken place in 1585.⁴⁹ He followed Botero's lead in differentiating work in the agricultural and manufacturing sectors, but qualified the distinction further by grounding it in the theories of increasing and diminishing returns to scale – whether unit production costs would rise or fall if a nation chose to specialize in any particular activity – to produce the first coherent statement of this important economic law (De Luca 1968, 33). Manufactures, Serra argued, are unique because the costs of labour proportionally go down with increasing volumes of production:

There can be multiplications in manufactures which lead to a multiplication of profits, something which does not happen in agriculture as one cannot multiply it. Nobody, for example, having a territory upon which only a hundred *tomola* of wheat can be sown, will be able to have a hundred and fifty sown; but among the manufactures, it is just the other way, since they may be multiplied not only two-fold but two hundred-fold, and with proportionately less expense.⁵⁰

⁴⁸ (Botero 1589, 152). Following Botero the use of the Potosí mines to highlight the importance of manufactures becomes a leitmotif in early modern political economy across Europe. For example, we find Geronimo de Uztáriz in 1751 proclaiming '[Manufactures] is a mine more fruitful of gain, riches, and plenty, than those of Potosí' (Uztáriz 1751, Vol. 1, 9). The first professor of economics outside Germany, Anders Berch in Uppsala, compares manufacturing to 'inexhaustible gold mines' (Berch 1747, 216). The term used is *outlöselige Guldgrufvor*.

⁴⁹ Selwyn (2004). See page 73 for the 1585 bread riot.

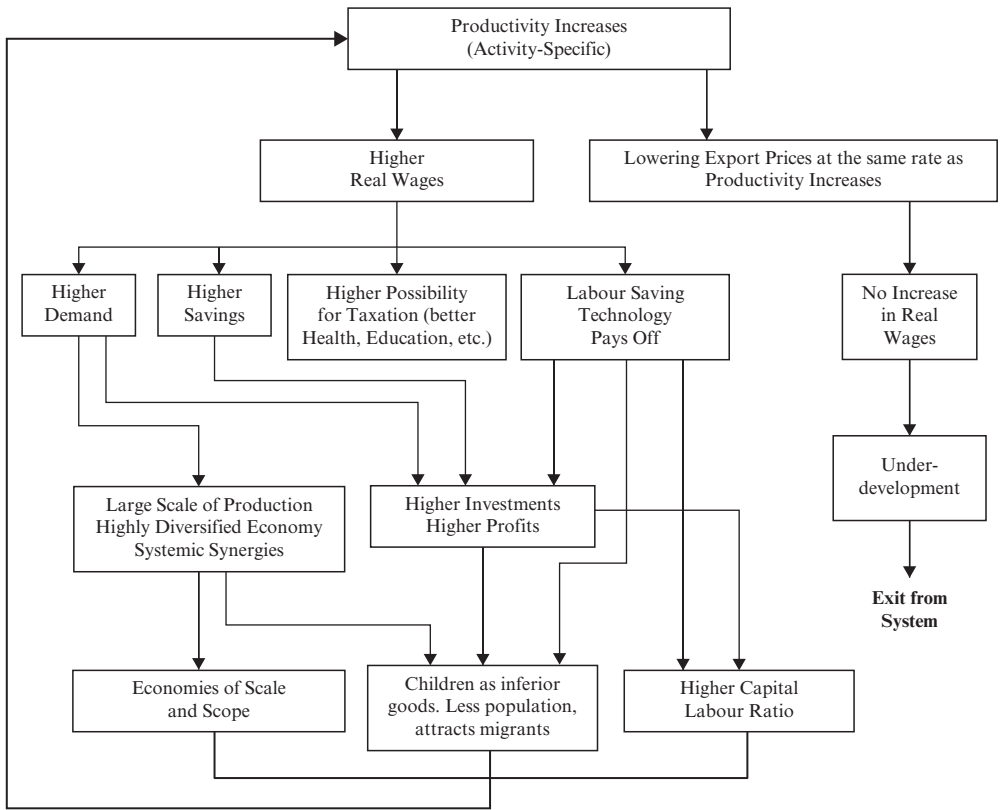
⁵⁰ Serra, Antonio, *Breve trattato (Brief Treatise)* (1613), pp. 11–12: 'nell'artefici vi può essere moltiplicazione, e per quella moltiplicarsi il guadagno, lo che non può succedere nella robba, non si possendo quella moltiplicare, che nissuno (per essemplio) se in alcun suo territorio non si può seminare se non cento tomola di frumento, potrà fare che se ne semino centocinquanta, ma nell'artificii è il contrario, che si possano moltiplicare non solo al doppio, ma a cento doppi e con minor proportione di spesa'.

Increasing and diminishing returns – more often separately than together – have played an important role in the history of economic thought. As already mentioned, Serra was no doubt the first to explain these mechanisms, and in this way added the theoretical mechanisms behind Botero's astute observations and explanations. Examining Serra's argument more closely, it is essentially one which explains the difference in purchasing power in manufacturing in competition with other nations, as well as one about how manufacturing and increasing returns create barriers to entry and imperfect competition on a company level.

Today increasing returns are important in industrial economics as a main source of barriers to entry (Tirole 1982, 305). In his classical work on the subject, Joe Bain defined as a barrier to entry anything that allows incumbent firms to earn supernormal profits without threat of entry (Bain 1956). Our claim is that there is a direct link between the imperfect competition found in manufacturing – allowing higher profits and higher wages and thus making it profitable to invest in labour-saving technological innovations – and economic growth and development. A key link in this process is the steadily increasing demand that comes as a by-product of this process. Any businessman knows that 'perfect competition' is tantamount to not making money, and would see the idea of 'not making money' – that is, perfect competition – as a strange concept to be put at the core of capitalist economic theory, as is done in neoclassical economics. Figures 1.1 and 1.2, based on Serra's theories, describe the virtuous and vicious circles of economic development.⁵¹

If we ask ourselves why Bill Gates makes more money than a Seattle housepainter, the differences in scale effects, and consequently in barriers to entry, are an important part of the explanation. The house painter in practice operates under constant returns to scale: after having painted one house, the time and material employed to paint a second identical house will be the same as with the first house. In Bill Gates's Microsoft it may take an investment of \$500 million to develop a new generation of programs – in other words unit number one produced costs \$500 million – but subsequent units produced will cost only fractions of a dollar to distribute electronically. In this way Gates's profits, as opposed to that of the house painter, are protected by the high fixed costs of producing unit number one. The lowering of cost of producing additional units, extreme in the case of Gates, is what is found at differing degrees in manufacturing, but – as Serra concluded above – this is not found in agriculture. This is because in agriculture (and mining) one factor of production (land, ore) comes in different qualities, limited by Nature. Serra was the first to describe increasing and diminishing returns, the virtuous circles of cumulative causations where – protected from perfect competition – the dynamic increasing returns of manufacturing allow profits, wages and tax income to create what we call economic development. It is important to note that while traditionally increasing returns have been limited to manufacturing, they are also now increasingly found in the advanced service

⁵¹ My PhD thesis in economics (Reinert 1980) was an empirical test of Serra's theory: to what extent was manufacturing production subject to increasing returns and the production of raw materials subject to diminishing returns? The answers overwhelmingly proved the validity of Serra's theories: the main export items of Bolivia, Ecuador and Peru showed huge diminishing returns, which could most easily be seen as huge increases in labour productivity any time production was sharply reduced (as in the 1930s). This result would not surprise any agricultural or mining economist, but the practical importance of this for economic development and its absence has long been neglected in the realm of economic policy.



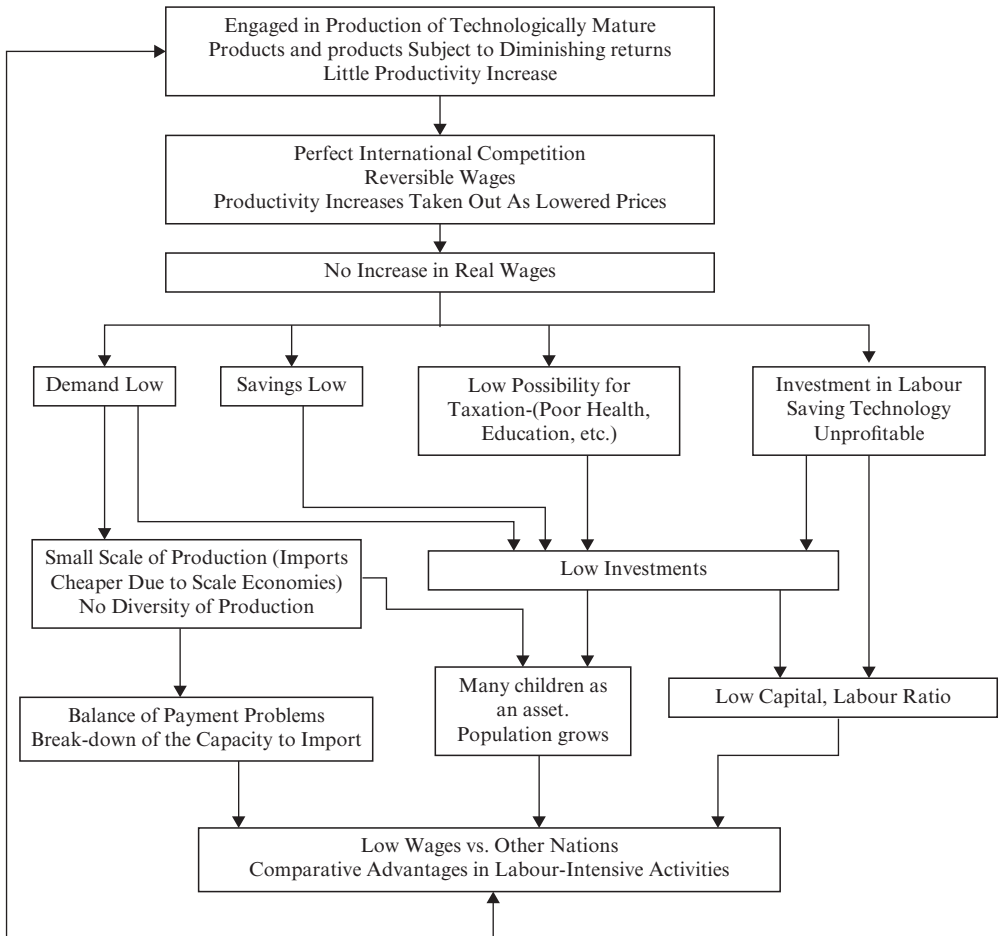
Source: Based on Reinert (1980, 39).

Figure 1.1 The virtuous circles of economic development: Marshall plans

sector. So the argument for ‘manufacturing’ should also be extended to increasing returns activities in the service sector.

‘THAT WRETCHED DIVISION OF LABOUR AND INCREASING RETURNS’

If increasing and diminishing returns are so important in order to explain wealth and poverty, why has the question had so little impact on recent economic policy? The answer is twofold: first of all it was for a long time difficult to reconcile increasing and diminishing returns with the tools chosen by the economics profession. Peter Groenewegen, the celebrated historian of economic thought, titled a book chapter ‘That wretched division of labour and increasing returns’, explaining that the reason economists see ‘increasing returns and the division of labour as wretched (is) because they play havoc with conventional notions of competition and equilibrium’ (Groenewegen 2003, Vol. 1, 186). The second part of the answer no doubt lies in what Thorstein Veblen would have called ‘the



Source: Reinert 1980 p. 41 (1)

Figure 1.2 The vicious circles of poverty: Morgenthau plans

vested interests': the vested interests of the industrialized West, at least short term, were to keep the Third World as suppliers of raw materials, as David Ricardo's trade theory opened up for. I emphasize short term, because in the long term, considering the number of refugees from de-industrialized countries, it would also be in the interest of the West to industrialize the poor world. In addition to stopping the flow of refugees, industrialization would boost global demand and create new customers for the West.⁵²

⁵² This was in fact an argument used in the nineteenth-century US: England should not be jealous of US manufacturing, as this process would create a bigger demand for England than a US without a manufacturing industry could ever provide. Instead of exporting spades to the US, England would export machinery to manufacture spades.

As Kenneth Arrow recognized in his introduction to W. Brian Arthur's book on *Increasing Returns and Path Dependency in the Economy*:

The concept of increasing returns has had a long but uneasy presence in economic analysis. The opening chapters of Adam Smith's *Wealth of Nations* put great emphasis on increasing returns to explain both specialization and economic growth. Yet the object of study moves quickly to a competitive system and a cost-of-production theory of value, which cannot be made rigorous except by assuming constant returns. The English school (David Ricardo, John Stuart Mill) followed the competitive assumptions and quietly dropped Smith's boldly-stated proposition that, 'the division of labor is limited by the extent of the market', division of labor having been shown to lead to increased productivity. (Arrow 1994, ix)

The increasing returns phenomenon, first described as an economic phenomenon by Antonio Serra, has led a perilous and marginal existence in economics because it is essentially incompatible with perfect competition and with equilibrium. Those who have tried to deal with the problem, like French mathematician and economist Cournot (1838), develop theories of monopoly and oligopoly. Formalizing Serra's model numerically is not a problem. This was done convincingly in 1923 by the Princeton economist Frank Graham (1923) (see the Appendix). The problem is that this key factor of determining the wealth and poverty of nations is not compatible with what has been selected as the key metaphor in economics: equilibrium.

In the twentieth century increasing returns were also discussed by Allyn Young in 1928, Edward Chamberlin and Joan Robinson in the 1930s, and then again by Nicholas Kaldor in the 1950s. But, as Kenneth Arrow puts it, 'this tradition acts like an underground river, springing to the surface only every few decades' (Arrow 1994).

The emphasis of authors who have recently 'rediscovered' increasing returns – such as Arthur (1994) in the context of technological change and path dependence, or Krugman (1991) in the context of geographical clustering and inter-regional trade – is that increasing returns are generated by positive feedback loops that magnify small initial conditions and thereby generate path dependence, whether of a technology or of a geographical location.

PAUL KRUGMAN'S BRIEF FLIRTATION WITH SERRA'S DICHOTOMY

'About a year ago I more or less suddenly realized that I have spent my whole professional life as an international economist thinking and writing about economic geography, without being aware of it' said Paul Krugman in a 1990 lecture which was later published as *Geography and Trade* (Krugman 1991, 1). In this volume, Krugman essentially explained – without quoting them – why the theoretical approaches of Giovanni Botero and Antonio Serra, whose main goal was to explain why wealth was geographically so unevenly spread, were not compatible with standard economic theory:

The neglect of spatial issues in economics arises for the most part from one simple problem: how to think about market structure. Essentially, to say anything useful or interesting about the location of economic activity in space, it is necessary to get away from the constant-returns, perfect-competition approach that still dominates most economic analysis. As long as economists lacked

the analytical tools to think rigorously about increasing returns and imperfect competition, the study of economic geography was condemned to lie outside the mainstream of the profession. Indeed, as standards of rigor in economics have risen over time, the study of location has been pushed further and further into the intellectual periphery.

Krugman correctly claimed that the reason scale effects were excluded was that the profession was unable to express them mathematically. Starting in 1979, Krugman published a series of articles introducing increasing returns in international trade theory. His 1979 and 1980 articles, reproduced in the volume cited, model a world where an initial discrepancy in capital-labour ratio exists between two countries or groups of countries. A period of increasing international trade follows, where only the industrial sector works under increasing returns to scale. The result of this is a world divided into two groups, a rich industrialized centre and a poor underdeveloped periphery. In these papers, Krugman referred approvingly to Myrdal, Frank, Baran, Wallerstein and even Lenin.

This breakthrough in international trade theory was the result of using models originating in the study of imperfectly competitive markets in the field of industrial economics. Krugman inadvertently opened a Pandora's box, where international markets are no longer fully competitive, but systematically asymmetrical (increasing versus diminishing returns) and where countries therefore may grow poorer in the presence of free trade than under autarky. Paradoxically, the wave of Reaganomics free market policies, which hit the developing countries in the 1980s, roughly coincided with the first proof of neoclassical trade theorists that government intervention really could improve the free trade situation of a poor country (Grossman 1992). Krugman's conclusions are no more precise than were Alfred Marshall's in 1890: that a country can be better off subsidizing its increasing returns activities and taxing those under diminishing returns (Marshall 1890, 448–449).

However, Krugman does not refer to Alfred Marshall. His history of increasing returns starts with Graham's 1923 article,⁵³ and he has no mention of the long history of increasing returns – going back to Serra in 1613 – as a cause of imperfect competition and consequently as a factor determining economic policy, especially the support and protection of national industry.

Krugman's imaginative models have extended to 'a clever paper on interstellar trade, where goods are transported from one stellar system to another at speeds close to that of light; the resulting relativistic correction to time entails different interest rates in different frames of reference' (Dixit 1993). The problem in today's economic theory is that writing a model of a phenomenon proves next to nothing. Any good graduate student in economics can write a model showing their pet theory. The problem lies in verifying the models, and deciding which ones contain elements which point at important relationships in the real world. After siding with the dependency school, and with Lenin, in his 1979 and 1980 articles, Krugman has been sitting on the lid of the Pandora's box he opened. By the 1990s the asymmetrical aspects (Serra's increasing versus diminishing returns) of Krugman's work seem to disappear, to be substituted by a Ricardian model

⁵³ The core of which is reproduced in the Appendix.

Table 1.3 Economic characteristics that accompany increasing and diminishing returns

Characteristics of Schumpeterian activities (= 'good' export activities)	Characteristics of Malthusian activities. (= 'bad' export activities if no Schumpeterian sector present)
Increasing returns	Diminishing returns
Dynamic imperfect competition	Perfect competition (commodity competition)
Stable prices	Extreme price fluctuations
Generally skilled labour	Generally unskilled labour
Creates a middle class	Creates 'feudalist' class structure
Irreversible wages (‘stickiness’ of wages)	Reversible wages
Technical change leads to higher wages to the producer (Fordist wage regime)	Technical change tends to lower price to consumer
Creates large synergies (linkages, clusters)	Creates few synergies

with increasing (but not diminishing) returns added. The new insights based on Serra's dichotomy of increasing versus diminishing returns were – inexplicably in my opinion – lost. Krugman's 1979 and 1980 articles, which provided very important insights into the structure of North–South trade, appear to have been relegated to the same level as the interstellar paper: clever uses of mathematics with little or no practical consequences. In Table 1.3 I have put together a number of economic characteristics that accompany increasing and diminishing returns, respectively.

However, such qualitative differences between economic activities and between economic actors as are described in Figure 1.3 have effectively disappeared from the economics profession. As Nobel Laureate James Buchanan puts it: 'Any generalized prediction in social science implies at its basis a theoretical model that embodies elements of an *equality assumption*. If individuals differ, one from the other, in all attributes, social science becomes impossible' (Buchanan 1979, 231).

This writer would add that the same argument applies for economic activities. If they are different, the lack of 'mathiness' in conveying qualitative differences disqualifies such observations from 'serious science'. Alfred Marshall's idea of 'the representative firm' disqualifies the economics profession from seeing that the 'firm' of a 12-year old shoe-shine boy in the slums of Lima is a very different creature from Bill Gates's Microsoft. Indeed, economic theory hails the market conditions of the former as 'normal' ('perfect competition') and the latter not. This blind spot has enormous consequences for our inability to eradicate poverty.

SERRA AND THE TECHNOLOGY OPTIMISM/TECHNOLOGY PESSIMISM DEBATE

The 1972 book *Limits to Growth* (Meadows et al. 1972) marked a turning point in our understanding of the relationship between Planet Earth and its people. What is not so well known is that the following year a group of researchers – most of whom were based at the University of Sussex – produced a volume in response: *Models of Doom: A Critique of the Limits to Growth* (Cole et al. 1973). The Sussex group's response to the Massachusetts Institute of Technology (MIT) model used in *Limits to Growth* was essentially 'Malthus in, Malthus out': any models based on diminishing returns – as that of Malthus – would produce very pessimistic results. *Limits to Growth* had underestimated the potential for technological change and increasing returns.

Since 1972 two camps seem to have formed, one of notorious technology pessimists and the other of notorious technology optimists. Mainstream economics, with its insistence on constant returns to scale, has not enlightened the debate between the two opposing camps. In a 2014 article in *Futures* (Mathews and Reinert 2014), John Mathews and I argued that the insights of Antonio Serra should be used in deciding when technology optimism and when technology pessimism is appropriate. The article also describes some of the industrial dynamics which result from a world dominated by increasing and diminishing returns and technological learning.

The paper uses the energy sector as an example, arguing for renewable energy based on the difference between extracting and harvesting energy. Extraction of fossil fuel takes place under diminishing returns, in a situation where technological change fights to counteract the fact that resources are increasingly costly to get at. Harvesting nature's renewable energy, on the other hand, is subject to no such limits. Costs per unit of extracted energy are bound to increase after a certain point, and this point has been reached long ago. Renewables, on the other hand, are harvested and manufactured – as are all manufactures – under conditions of increasing returns: costs tend to decrease with increased volume of production.

Increasing returns are also found when technology is held constant, that is, as production moves along the cost curve into higher volumes. But this phenomenon of falling costs is particularly important because cost curves tend to shift with new technologies. Plotting the actual cost of production over time gives us the learning curve. This curve describes how every time the quantity of units manufactured doubles, the number of direct labour hours tends to decrease at a uniform rate (Hirschman 1964; Reinert 1980). A related phenomenon, the experience curve, is found when total costs rather than only labour costs are imputed (Boston Consulting Group 1972; Reinert 1980).

Extracting oil from tar sands or gas from coal seams is what Klare (2012) calls 'extreme resources', in the sense that they are extremely difficult to extract, extremely dangerous and extremely dirty. Tar sands oil pollutes not just the land where it is extracted, but everything downstream as well – including, it would seem, the media.

The world of energy is only now discovering the key differences between manufacturing as a source of wealth (utilizing manufactured renewables), and resource extraction, which is subject to diminishing returns. As noted previously, while diminishing returns indeed give reason for pessimism, increasing returns make it possible to take a more optimistic view. US economist Erasmus Peshine Smith (1814–1882) was in a sense a

visionary of renewable energy when he argued: 'The entire universe then *is* motion, and the only point is how much of the universal and ceaseless motion we shall utilize, and how much we shall permit to be working against us' (Hudson 1968, 104).

In response to concerns over the future of the planet, many are calling for an end to economic growth, in the name of respecting ecological limits and finite planetary resources. The problem is that this concern is based on a misunderstanding of the character of economic growth. If it is extensive growth – that is, based on increasing resource throughput – then it is clear that it must one day come to a halt and be succeeded by a stationary state, if humans and life in general are to survive. But it is perfectly possible to have intensive growth: that is, growth in incomes without a corresponding growth in resource throughput. This is what is meant, in fact, by increasing returns: getting more out of what is put in. So capturing increasing returns means, essentially, embarking on a process of intensive growth; which if based on renewable energies (always available) and resource recirculation can be accurately called 'green growth'.

It is to be expected that new 'green' sectors like renewable energies and circular economy linkages (industrial symbiosis) will grow and propagate based on their capacity to generate synergies and increasing returns, in exactly the same way that Kaldor (1970) foresaw that regions based on manufacturing activities would flourish at the expense of regions locked into diminishing returns activities.

Scholars grapple with phrases or metaphors to describe this amazing reality, as in phrases like 'virtuous circles' or 'circular and cumulative causation', all of which are based on increasing returns or manufacturing multipliers. The best and most graphic phrase is that coined by Kaldor: increasing returns propagate through manufacturing value chains like a 'chain reaction', where each addition of an increasing return (multiplier) is based on earlier such multipliers.⁵⁴ The greater the intensity of linkages secured, the greater the multiplier effect. This is the secret of the effectiveness of manufacturing clusters or industrial districts; or, in the case of green production, of eco-industrial clusters or parks.

Mainstream economics completely obscures this process with its relentless focus on equilibrium, perfect competition, constant returns to scale and the representative firm. All these concepts make sense only in a world abstracted from any resemblance to real business processes; which is why all the successful and wealthy countries today pursue strategies based on developmentalism and industry policy rather than purist free trade based on equilibrium reasoning.

CONCLUSION

If we look at the history of economic policy – rather than the history of economic ideas – the record of the last 500 years of world economic history has been one of heavy-handed industrial policy favouring manufacturing over the production of raw materials. One

⁵⁴ The notion of 'circular and cumulative causation' was introduced into economic reasoning by Myrdal, and was taken up by Kaldor (1970), as explained in detail by Toner (2000). Related concepts in the setting of development economics are the 'big push' (Rosenstein-Rodan) and balanced versus unbalanced growth (Nurkse, Hirschman). These issues are discussed in Chapter 19 in this volume, on classical development economists.

aspect of this heavy-handed policy was the prohibition of manufacturing in Europe's colonies, an aspect which contributed to many colonial uprisings, including the independence movement of the United States.

From the point of view of economic textbooks, students of course get an entirely different picture. Free trade – ‘doux commerce’ – is being presented as the key to economic growth and welfare. However, going back to the historical record we find that only industrialized countries have ever made it into the club of the rich.⁵⁵ The only exceptions here are countries living off petroleum rents, generally with a very skewed income distribution. So sweet commerce – ‘doux commerce’ – is clearly not the key to wealth, it is rather a much less poetic ‘sweet increasing returns’ or ‘*doux rendements d'échelle croissants*’. In 1588 Giovanni Botero gave us the narrative explaining this, and in 1613 Antonio Serra added the key theoretical point: the key lies in what happens to a nation's production costs as production increases, that is, in increasing and diminishing returns to scale, and the resultant market conditions.

Hundreds of years of often extremely successful economic theory and policy under the labels ‘mercantilism’ and ‘cameralism’ – including the emergence of Europa and the US as world economic powerhouses – testify to Botero's and Serra's main points. While classical development economists may have argued about whether to adopt a gradual and balanced development or a big push, and while they may have argued about the importance of linkages and of the terms of trade, they all agreed with Serra that industrialization was a necessity. In classical development economics increasing returns were always the key argument for industrialization, and the 1947 Havana Charter⁵⁶ (formally the Final Act of the United Nations Conference on Trade and Employment) allowed for nations to protect their manufacturing industry: (1) as long as their production was not at the production possibility frontier (that is, as long as there was unemployment); or (2) if the country had a plan for industrialization. With the victory of neoclassical economics other models took over and the World Bank started using models assuming full employment, even in countries like Haiti where a maximum of 20 per cent of the adult population have what one could define as a job.

Going back to Botero and Serra, however, we find that the key factor is not industry or manufacturing per se, it is the virtuous cumulative causations set in motion by increasing returns which, as already mentioned, may also be found in the service sector. However, a country based on the export of raw materials is unlikely to develop large demand for advanced service products, so the industrial sector is still needed.

As Groenewegen noted, the increasing returns Serra first described are ‘wretched’ because this very real fact of everyday life is fundamentally incompatible with the main metaphor upon which the economics profession has chosen to construct its edifice – equilibrium – and the standard assumption of constant returns to scale. In an economy where all production takes place with constant returns to scale over all ranges of output for all goods, there would be no trade at all (except presumably in raw materials). Each

⁵⁵ Vries (2013) makes this same point, as does (as already mentioned) former World Bank Chief Economist Justin Lin (2012). Even the World Bank Chief Economist admits to Serra's point, and to the theories of classical development economics, but this insight hardly influences the policies of the World Bank or the Washington institutions in general.

⁵⁶ See chapter 15 in this volume.

person would become ‘a microcosm of the whole society’, as James Buchanan puts it (Buchanan 1979, 236). And as a new ‘anti-textbook’ of economics hammers in: ‘all factors can earn their marginal product only if there are constant returns to scale’ (Hill and Myatt 2010, 180).

We are faced with the fundamental paradox that under the standard assumptions underlying Paul Samuelson’s proof that free trade will tend to lead to the equalization of world wages – perfect information and constant returns to scale – all trade of manufactured goods would cease to exist. Every individual on Earth would be completely self-sufficient in everything but raw materials. In order to explain why trade exists at all, we have to introduce factors that violate the assumptions which prove that we shall all be equally rich if we only let free trade be the governing principle of the world economic order. The very factors which cause international trade are the very same reasons that we live in a world where economic development is uneven. Two fundamental factors at work here are the dynamic and cumulative effects of Serra’s innovations: diminishing and increasing returns to scale, respectively leading to perfect and imperfect competition.

Almost six decades ago development economist and Nobel Laureate Gunnar Myrdal foresaw that:

within the next ten or twenty years the now fashionable highly abstract analysis of conventional economists will lose out. Though its logical base is weak – it is founded on utterly unrealistic, poorly scrutinized, and rarely even explicitly stated assumptions – its decline will mainly be an outcome of the tremendous changes which, with crushing weight, are falling upon us. (Myrdal 1976, 88)

It is indeed likely that Myrdal was wrong only about the timing. Just as physiocratic theory – in all practical matters – lost its lustre after the famines caused by speculations and excessively ‘free markets’ leading up to the French Revolution (Kaplan 2015 [1976]), and David Ricardo lost out in the theoretical battle after 1848, today’s abstract theory is likely to lose ground. However, the moves to build alternative theories based on the cumulative causations set in motion by increasing and diminishing returns are not widespread.⁵⁷

Regardless of what happens to economic theory, in real life increasing and diminishing returns are going to play key roles in determining the wealth and poverty of nations. In which technological and economic contexts these two factors are going to develop is an open question. On the one hand we find a tendency towards extreme cases of increasing returns where information technology has opened up for production and distribution at marginal costs which are close to zero. This may result in extreme concentration of wealth and power, economically and politically, especially as the climate for establishing a global antitrust organization is extremely weak.⁵⁸

On the positive – decentralizing – side, three-dimensional (3D) printing might become part of a process of ‘distributed manufacturing’ which counteracts the traditional industrial paradigm based on economies of scale and cheap transport. Another possible

⁵⁷ One example is Berger (2009).

⁵⁸ An international antitrust organization was suggested by the UN report on the financial crisis, the so-called ‘Stiglitz Report’ (Stiglitz et al. 2010).

development is ‘commons-based peer production’, also called ‘social production’. These terms describe a new model of socio-economic production in which the creative energy of large numbers of people is coordinated (usually with the aid of the Internet) into large projects without traditional hierarchical organization. Wikipedia, Facebook and YouTube are examples of such peer production, creating economies of scope (in a shared infrastructure) rather than economies of scale. So – in a somewhat paradoxical way – the hugely increasing returns to scale in information technology as a generic infrastructure technology seem also to lead to huge potentials for decentralization and less reliance on increasing returns in the final stages of production.

In whatever way the future balance of increasing and diminishing returns may play out, it is increasingly obvious that the continuing marginalization – even disregard – of Antonio Serra’s great contribution to the science of economics is very costly both in terms of scientific relevance and in terms of our ability to eradicate world poverty.

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APPENDIX: FRANK GRAHAM'S DYNAMIC THEORY OF UNEVEN DEVELOPMENT BASED ON INCREASING AND DIMINISHING RETURNS

Source: Graham (1923), reproduced in Reinert (2007, pp. 309–310).

STAGE 1: World Income and its Distribution before Trade

Country A				Country B			
Man-days	Output per man-day	Production		Man-days	Output per man-day	Production	
200	4	wheat	800	200	4	wheat	800
200	4	watches	800	200	3	watches	600

World production: 1600 wheat + 1400 watches. In wheat equivalents: 3200

Country A's income in wheat equivalents: 1714 wheat

Country B's income in wheat equivalents: 1486 wheat

Price: 4 wheat = 3.5 watches

STAGE 2: World Income and its Distribution after Each Country Specializes According to Its Comparative Advantage

Country A				Country B			
Man-days	Output per man-day	Production		Man-days	Output per man-day	Production	
100	4.5	wheat	450	300	3.5	wheat	1050
300	4.5	watches	1350	100	2	watches	200

World production w. trade: 1500 wheat + 1550 watches. In wheat equivalents: 3271

Country A's income in wheat equivalents: 1993 wheat

Country B's income in wheat equivalents: 1278 wheat

Conclusion: the country which specialized in the economic activity subject to diminishing returns grew poorer than it had been before trade. The opposite happened to the country specializing in increasing returns activities.

2. Economic emulation and the politics of international trade in early modern Europe

*Sophus A. Reinert**

‘Jealousy’, an anonymous fifteenth-century Florentine warned, is ‘a very bad enemy.’ Envy lay ‘in the heart of everyone’, besieging commercial society with men seeking to ‘appropriate’ the wealth of the more successful (Molho 1969, 53–58). In the coming centuries, the problem of jealousy also came to be experienced and understood at the level of cities, nations and empires, among which relative material inequalities could be both more conspicuous and more consequential. In the opening years of the Seven Years War, the Bourbon Plenipotentiary in Naples, Bernardo Tanucci, harnessed what had by then become a venerable lexicon: ‘The inequality between men and between nations’ and the consequent ‘fear of the more powerful’ were the cause not only of all the world’s ‘laws and alliances’ but also of ‘jealousy’ (Tanucci to Montealegre 1758, in Migliorini 1984, 144). And as Europe embraced the wider world, through conquests as well as commerce in the early modern period, it was spurred by economic rivalries of this very nature. Though both the elder Mirabeau and Adam Smith railed against the evils of the ‘mercantile system’ in the eighteenth century, their contemporaries across the Continent knew this disorder by the name of ‘jealousy of trade’ (Hont 2005; Reinert 2009).

From a bird’s-eye perspective, such phraseologies of economic envy first emerged in Europe’s various vernaculars when early modern observers began realizing the increasingly existential importance of international trade. Drawing on a venerable Ciceronian maxim, Louis XIV’s finance minister Jean-Baptiste Colbert perhaps explained the logic of the underlying argument most famously in the mid-seventeenth century: ‘Commerce is the source of finance, and finance is the sinew of war’; hence, there existed a ‘perpetual and peaceful war of mind and industry among all nations’ (Colbert 1861–1882, 3: 1, 37 and 5: 269).¹ Since jealousy was widely conceived to be a child not only of envy but also of fear, jealousy of trade was a natural reaction to the danger of falling behind in a world in which trade, war and ultimately independence were inexorably intertwined (Gundersheimer 1993, 321). Though long ignored by historiography, jealousy of trade was in effect a widespread and lamentably accurate early modern idiom for addressing this complex of forces and incentives, which have structured relationships between polities since the late Renaissance. In a best-selling critique of European imperialism, Guillaume Thomas Raynal eloquently summarized precisely what was at stake: ‘One knows that jealousy of trade is nothing but jealousy of power’ (Raynal 1780, 10: 167–168). Comparative commercial wealth had become a measure of relative might in

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¹ Drawing on Cicero (1926, 260–261).

the world, not only between individuals but also between polities (Reinert 2011). In a Neoplatonic fashion, the microcosm of the jealous Florentine merchant had become a macrocosm of international relations.²

Industry, technology and financial instruments alike had evolved to the point in early modern Europe where the lessons learned from the Peloponnesian War – that time-honored repertoire of military wisdom – no longer sufficed to conceptualize all the practical and moral variables of international conflict and competition. Once, virtuous Spartans (admittedly benefitting from rather generous Persian subsidies) might have routed commercial Athenians, but the times had changed. From one end of the Continent to the other, a growing chorus of voices came to agree with Colbert that wealth, indeed, was the sinew of war (Strassler 1998). From the rise of fortifications to capital ships and artillery, technological developments in the art of war put increasingly stringent demands on state coffers and, by some accounts, contributed to the development of new administrative structures today intrinsic to modern conceptions of the state, such as permanent taxation to support standing armies, as well as concomitant notions of nationalism (Parker 1996; Hale 1983).³

Intellectual historians in the tradition of J.G.A. Pocock have painstakingly elucidated the conservative reaction to these developments in terms of the tension between wealth and virtue in certain currents of early modern European political thought. Though it is abundantly evident that numerous elite and most often conservative theorists conceived of a dichotomous relationship between commercial wealth and patriotic *virtù*, historiography has gone too far in embracing this as a leitmotif for the age.⁴ It was by no means the only way of thinking about the military and political fallouts of economic competition at the time, nor was it the most widespread in the European world (Reinert 2011, 8). Even Niccolò Machiavelli, whose ostensibly exclusive faith in virtuous citizen militias has been made paradigmatic in the literature, came to focus largely on economic concerns when analyzing the epochal 1494 French invasion of Italy in the final years of his epistolary.⁵ In effect, one must turn back to this shift of emphasis in late Renaissance reason of state to understand the conceptual core of Enlightenment political economy, originally a science for making polities materially viable in a world of ruthless economic competition. As Minerva's owl proverbially took flight from Italy's sixteenth-century dusk, and the peninsula's primacy in Europe came to an end, numerous observers turned to analyzing why and how the Lilliputian Italian city-states had achieved such Brobdingnagian *grandezza* in earlier centuries, and their explanations were economic rather than martial in nature. For, as the Brescian patrician and military theorist Giacomo Lanteri put it in 1560:

In Italy we have four of the biggest cities, in which commerce has always been praised, and which always, from the time in which they began to bloom (except one), have been extremely

² On this parallel see, among others, Marsilio Ficino in Eugenio Garin (1978, 47), Branca (1986, xvi) and Plessis (1961, 48). The classical statement was Xenophon (1994, 45–46).

³ On the private sector of warfare, however, see Parrott (2012); on the related question of representative institutions and the capacity to secure credit in the context of the largely mercenary-run warfare of early modern Europe, see Stasavage (2011). On war and the origins of nationalism, see Colley (1992).

⁴ For an influential statement see Pocock (1995, 48).

⁵ See, for example, Niccolò Machiavelli to Bartolomeo Cavalcanti, c. 6 October 1526, in Machiavelli (1971, 1245–1246). Interestingly, Machiavelli's historical interlocutor, the anti-Medicean agitator Cavalcanti, also emphasized the importance of international trade for the welfare of a polity; see Cavalcanti (1838, 276).

powerful. These are Venice, Genoa, Florence, & Pisa. From what can one say their greatness derives? Certainly from nothing else but from commerce; from nothing but their frequent trades of all sorts.⁶

This would become nothing less than a mantra, reiterated with only few amendments well into the Age of Revolutions. In 1797, the Genoese patrician Agostino Bianchi argued that the '*grandezza*' and 'happiness' of both Genoa and Venice ultimately had resulted from 'Commerce', that through trade and navigation his city had reached 'the peak of power', and that the 'bloody conflicts' between the two polities had been driven solely by 'jealousy of trade' (Bianchi 1797, 36–37, 50–51, 235). This is, of course, not to suggest that earlier practitioners had been unaware of the intimate connection between economic success and worldly greatness (see, e.g., Sanudo 2001; Anon. 2001).

Originally emerging out of commonsense observations as well as more erudite humanist doctrines of national defense in the various city-states of Italy, such notions of economic greatness became increasingly influential, thanks also to the extraordinary impact of Giovanni Botero's works, under the polyvalent aegis of reason of state⁷ (Hont 2005, 11). In England, Botero's acute reader Francis Bacon theorized the 'embracing of trade' and the 'increase of territory' as two ways by which a state could 'overgrow' its neighbors, going so far as to argue that 'work' was 'the true greatness of kingdoms and estates'. He was echoed in France in one of the most widely read works of this tradition by Henri the Duke of Rohan. The Duke criticized the Spanish Empire for having thought only of conquests, without considering the needs of its empire's subsistence, and argued that England had become of 'very great account' solely by virtue of her 'great riches' derived from 'commerce' (Bacon 1985, 117, 147; Henri 1640 [1639], 5, 34; Hobbes 1995, 44). In spite of a historiographical commonplace, in short, there existed eminently economic alternatives to virtuous military *grandezza* in Renaissance political thought, both high and low, achievable through collateral forms of economic *virtù* and parallel conceptions of empire⁸ (Martines 1963, 25–26). And these often equally bellicose alternatives would be explicitly codified under the moniker of political economy in the early modern period, remaining influential from one end of the Continent to the other, into the nineteenth century and beyond (see, e.g., Anon. 1641, vii; Genovesi 1757–1758, 1: ii and *passim*; Pram 1811, 20).

Thomas Hobbes famously imagined a world in which political communities confronted each other 'in the state and posture of Gladiators', and a recurrent dream of subsequent political theory has been to pacify international relations by substituting goods for gladii (Hobbes 1996, 90). Historical experience nonetheless continued to stymie these hopes in the long eighteenth century, primarily because England, like Venice three centuries earlier, proved ambidextrous enough to gut her neighbors with one hand and sell them cheap funeral shrouds with the other. And even after the

⁶ See the tradition stretching from Lanteri (1560, 98) to Botero (1589) and Serra (2011 [1613]). For examples of commercial virtue, see Reinert (2011, 8, 22–23, 75, 138).

⁷ On the influence of Botero's economic conception of greatness, even though he does not engage with its longer history, see also Fitzmaurice (2007) and Fitzmaurice (2012, 485–486).

⁸ For an iconological expression see Ripa (1992, 359–360).

proverbial swords were beaten into plowshares, the seminal importance of economic power in the modern world led many to think even liberty was for sale. Independence was threatened by economic rivalries regardless of whether communities faced each other 'in the state and posture of Gladiators' or in that of merchants. War and wealth went hand in hand in the modern world, and by failing at one, a political community could quickly botch both, putting its very existence at risk (Reinert 2010). Thus, according to many eighteenth-century observers, what really was at stake in international trade was power and ultimately independence, but a more nuanced understanding of the threats facing political liberty at the time, and of how these were formulated and expressed, may shed light on the politics of international trade in the early modern period.⁹

In effect, the testimony of the Dutch officer of the East India Company and twice Governor-General of the East Indies, Jan Pieterszoon Coen, retained its cogency as an indicator of just how the winners in international relations explained their success throughout the period here under analysis: 'one cannot do commerce without war, nor war without commerce' (Fusaro 2008, 71).¹⁰ Or, as the best-selling Johan De La Court explained in his 1662 *Politike Discoursen (Political Discourses)*, 'conquests which allow commerce to increase and flourish, like those which the Europeans made at the expense of the Indians, are a good thing' (Court 1662, second pagination, 178). Similar statements were legion across Europe, and contrary to an influential argument in modern historiography, the possibility that an empire might be established through economic as well as military means was clearly articulated at the time (see, e.g., Gourney 2008, 242; Belloni 1751, 70n; Algarotti 1823, 1: 452). Republicanism and commercial society were not simply an antidote or a subsequent paradigm to the imperialist ideology of universal monarchy (cf., among others, Pocock 1999, 1: 109, 2: 169; Pagden 2005a, 178–187; Pagden 2005b, 56). They could also be its midwives, as was argued in a long tradition of political economy, which received one of its last and most succinct champions in the Neapolitan lawyer and professor of political economy Michele de Jorio in 1781. Commerce, he argued, had bestowed upon Britain 'dominion'; even where it sent no troops, 'a different kind of Empire' (Jorio 1778–1783, 1:21).¹¹ Though ostensibly friendly, free international trade could, for de Jorio and the science of legislation upon which he drew, establish empires and enable political communities to give laws to one another. True liberty, understood to mean independence from arbitrary power, in the end depended on the structures of the world economy as much as on domestic institutions (Jorio 1778–1783, 4: 299; 1979, 1: 91–93).

The idiom of 'dare' or '*dicere leges victis*', of 'speaking' or 'giving the law to the conquered', was a variation on the equation in classical antiquity of power with the ability to give laws and derived from the idea that liberty demanded subjection only to one's own legislation. Indeed, the original Greek meaning of autonomy was precisely to 'have one's own law' (for a similar translation, see Tuck 1999, 226). The alternative was to be

⁹ A viewpoint adumbrated by Schmoller (1897, 48, 50–51, 72, 75–76), Weber (1981, 347), Heckscher (1931, 1: 6 and *passim*) and Foucault (2007, 32, 102, 277, 337).

¹⁰ See, for equivalent English statements at the time, Findlay and O'Rourke (2007, 244).

¹¹ On how popular awareness of these mechanisms informed the American Revolution, see Breen (2004, 329–331).

conquered and thus unfree, to be *alieni iuris* or subject to the laws of someone else, as the condition later was codified in Roman law. After all, political units were largely conceived of in the tradition of the body politic at the time, by which, as suggested in Justinian's *Digest* of Roman law, free men and free communities alike had to be 'in their own power' and not 'under the power of someone else' in order to enjoy their *libertas* (*Digest* 1.6.4.; Skinner 2008, x–xii, 63–72, 173–177). This idea had been harnessed by Moses the Lawgiver and by Livy, by Roman jurists, and by prostrate Carthaginians forced to 'receive the law' at the feet of Scipio Africanus. It would become nearly ubiquitous in medieval and early modern Europe, from the practice of feudal serfdom and other forms of personal dependence over which this Roman legal language came to be applied, to the nearly endless ways in which it could metaphorically convey asymmetrical relations of power, whether social, military or economic (Tour 1787).¹² Machiavelli's platitude that 'rulers should do their best to avoid being at the mercy of other powers' might well have been derived from Alcibiades's timeless admonition to the Athenians, on the eve of the Sicilian expedition, that 'there is a danger that we ourselves may fall under the power of others unless others are in our power' (Machiavelli 1988, 79; Thucydides in Knox 1989, 92–109, 107–108). With the increasingly imperative importance of international trade in the early modern period, it was only natural that an expression previously used to signify *de iure* servitude and military conquests came to be deployed also for unequal economic relations. True independence required the current, even pre-emptive submission of others; wealth and liberty were competitive, hence the overarching, and later ridiculed, preoccupation with balances of trade and power.

In his 1758 *Law of Nations*, Emerich de Vattel argued, on the basis of an ancient tradition, that the 'famous scheme of the political equilibrium or balance of power' should be 'understood' as 'a disposition of things' whereby 'no power is able absolutely to predominate, or to prescribe laws to others' (Vattel 1787 [1758], 468). And Diderot was one of many to argue that 'political liberty is the situation of a people who have not alienated their sovereignty, and who either make their own laws or are associated to some degree in their legislation' (Diderot 1992, 186). To 'dictate the laws', de Jorio wrote in this vein, was 'the most important role of Government' (Jorio 1979, 1: 302). But this imperial idiom was in no way delimited to the realms of high theory. British and Dutch merchants of their respective East India companies meeting in mid-eighteenth-century Bengal would, for example, quarrel boastfully over who in the end would 'give Laws to that Part of the World' (Dunning 1762, 10). The promulgation of the idiom's usage in this latter era was intimately linked also to the gradual shift from dynastic and corporate to national rivalries in Europe, to the idea that individuals in a permanent political community could be empowered by the collective demonstration of force over foreigners in international competition (Greenfeld 2001, 1–58, 136).

An autocritical British dystopia of 1712 argued in this vein that 'O-Brazilians' – Englishmen in its allegorical architecture – look 'upon it as their undoubted Birth-Right to Revile, Slander, and Insult all the World; nay to give Laws to all other Nations' (Anon. 1712, 19). Although the phrase 'universal monarchy' is currently equated with the his-

¹² Livy, *History of Rome*, 34.57; Virgil, *Aeneid*, 12.112; John 1:17. See also, for biblical occurrences, many editions of Exodus 24:12, Deuteronomy 5:31, 7:11, 12:1 and 17:11. See also Tavilla (1993).

torical goals of either Spain or France, a growing fear in eighteenth-century Europe was that it would be Great Britain to give the world its laws, through the power of either its navies or its manufactures. Given the assumption that liberty was to live in a state of laws rather than license or arbitrariness, then precisely who set those laws – and under whose government one lived – was of cardinal importance. So widespread was this fear that a state could be enslaved by purely commercial means that the architects of the Williamite Settlement, the members of Vincent de Gournay's circle in Paris, and Antonio Genovesi's school in Naples – all eminent founding moments in the history of political economy – revolved around the contest to give rather than receive laws through international trade (Melon 1738, 9; Le Blanc 1747, 2: 91–93, 347–348, 353; Montesquieu 1989, 328–329; Butel-Dumont 1755, 1: 75; Genovesi 1757–1758, 1: lxxxv–lxxxvi, 35n–36n, 220n–221n, 367 and 2: 31n–32n). Malachy Postlethwayte put it well in his influential 1750s translation of Jacques Savary's economic *Dictionary*: 'certain it is, that wherever the Commercial Empire gains the Ascendant, there will the Scepter of Dominion bear the Sway' (Savary 1751–1755, 2: dedication).

For if differences in economic power could impose hierarchical relations between political communities – whether competing Italian city-states like Genoa and Venice or veritable empires like France and Britain – whereby some gave laws to and thus subjugated others, the politics of international trade could acquire heightened importance. In effect, through this idiom, nothing less than the viability of the polity as such came to be at stake in economic development and the policies pursued to assure it. Where a state was located in the architecture of the global economy – what it produced, what it traded, and how – was of literally existential importance. As Genovesi's greatest heir Gaetano Filangieri observed in his magisterial and hugely influential *Science of Legislation*, 'commerce' had become:

essential to the organization and to the existence of political bodies. For in the midst of opulence your name will be feared, your alliance will be desired, your rights respected, your pretensions supported well, [and] you will give the law to your neighbours, but they will give it to you if you are poorer than them. (Filangieri 2003, 2: 138–139 and n; but see also 1: 138–139)

Ancient ideals of liberty, civic happiness, and the common good had come to depend on forces much larger than those addressed by the canonical philosophers, forces which simultaneously set significant limits to domestic eudaimonia and opened new avenues for its realization. Wealth had become a cause rather than a simple consequence of greatness and the common good alike.¹³ Contemplating the economic history of the foregoing centuries, and probably ventriloquizing Raynal, the Roman economist Francesco Isola summarized these dynamics of international competition in 1811: 'And thus jealousy of trade became jealousy of power, and forced those who govern peoples to use the same dexterity in defending themselves against the commercial industry of nations, that they use to defend themselves against their arms' (Isola 1811, xi).¹⁴ What he described was something not unlike the world in which we live.

This suggests that scholarship long has overlooked one of the principal vectors of

¹³ See on this point Reinert's introduction to Serra (2011 [1613]).

¹⁴ See, for similar arguments before the mid-nineteenth century, Gennari (1823, 20) and Twiss (1847, 57).

political liberty in early modern Europe; a vector that not only sidelined but trumped debates about virtue and self-representation.¹⁵ No virtuous citizen militia could compete with capital ships and heavy artillery, as clarified with vicious eloquence from the 1630–1631 Sack of Magdeburg and the 1684 French bombardment of Genoa to Horatio Nelson's suppression of the Neapolitan Republic of 1799 and the British firebombing of Copenhagen in 1807.¹⁶ A state could no longer safeguard its liberty by closing itself off from international trade either, for no state could long resist the aggressive power of the great trading nations, no matter their wishes.¹⁷ Even the most autarkic early modern economic writers conceived of independence in relation to the military and commercial aggressions of their competitors, for throughout Europe the structures of international trade were unavoidably consequential for local political life (Reinert 2005, 2009). So if what we might call the *doux commerce* model of political communities envisaged that states could secure their freedom under the aegis of peaceful commercial relations, the alternative tradition of economic rivalry made liberty itself competitive. And since the economic sphere also followed certain laws, some economic activities being understood to be more conducive to competitive autonomy than others, a cardinal aspect of the science of the legislator and its attempt to secure freedom came to rest on the competitive management of the material world. 'Trade', as Hume so aptly put it, had become 'an affair of state' (Hume 1994, 51–57, 52).

This widespread but generally ignored idiom of 'giving' and 'receiving' laws sheds important light also on the political history of economic policy. For political economy was not merely about trade in the tradition discussed here; it was also about production. It was manifestly not, as acolytes of Adam Smith would come to argue, about catalactics, about exchange per se. International commercial society was – *pace The Wealth of Nations* – fundamentally not made up of dogs that had learned to barter bones. The London School of Economics (LSE) economist Edwin Cannan's priceless footnote to Smith's passage on the matter is, as such, more profound than often acknowledged: 'It is by no means clear what object there could be in exchanging one bone for another' (Smith 1976, v1: 17n). The international economy was, rather, composed of a motley assortment of dogs who, through industry, war and trade, sought to have better, juicier bones than their neighbors, and who by necessity sharpened some of them to stab their competitors. Not all bones are equal; economic activities have differential capacities for innovation and wealth creation. Mainstream theories and policies at the time – and the very discipline of political economy as first institutionalized – aimed to develop national productive capacity and more specifically domestic manufactures, allowing for entire societies to escape the Malthusian trap. The different cultures of knowledge that contributed to the codification of political economy in early modern Europe still need to be charted, but from one end of the seventeenth century to the other, from erudite humanists like the Neapolitan Antonio Serra to practical merchants such as the best-selling Bristolian John Cary, the policies best thought able to safeguard economic prosperity

¹⁵ As explicitly theorized by de Jorio (1979, 1: 91–93), building on Genovesi (1757–1758, 1: 28, 247–248).

¹⁶ On these events, see Wilson (2009, 471), *Il bombardamento di Genova* (1988), Davis (2006, 92–93) and Munch-Petersen (2007).

¹⁷ Argued explicitly by de Jorio (1979, 1: 152, 169). This was a universal problem. For its longevity see Davis (2006, 325–326). On closed commercial states see Nakhimovsky (2011).

and political liberty against foreign competitors were remarkably uniform (Serra 2011 [1613]; Cary 1695). This industrial tradition would find erudite validation in the ancient example of the lawgiver Solon, who decreed that Athenians were to export olive oil rather than olives, but was justified theoretically, institutionalized and widely emulated in the city-states of medieval and Renaissance Italy, among which the importance of encouraging domestic industries gradually became paramount (Plutarch 1914, 471; Vettori 1569, 5).¹⁸ And there can be no question that this complex of policies had their intended effect: Italy became the most urbanized, industrial and, per capita, wealthiest area on the planet by the year 1500, centuries before the so-called Great Divergence of the nineteenth century (Maddison 2006, 1: 42, 56, 92, 248; cf. Pomeranz 2000; Frank 1998, 276–277). The transformative powers of manufacturing did not go unnoticed, much like the Italian tradition of reason of state had not, and as other European powers sought to emulate Italy's lead, theorists began to explore how economic activities differed and, with time, why.

In a dialogue c.1530, Thomas Starkey argued that the poverty of London could be counteracted by working its raw materials domestically for export as manufactured goods, and John Hales followed suit in 1581 by dryly asking 'what groseness of wits be we of . . . that will suffer our owne commodities to go and set straungers a worke, and then buy them againe at theyr hands' (Starkey 1989 [1529–1532]; Hales 1581, 59). This was the basic insight behind Richard Hakluyt's influential proposal, in his 1584 discourse of western planting, for the establishment of a colonial system based on the synergistic relationship between a core committed to manufacturing and its colonial producers of raw materials. But although it was self-evident to these authors that it was better for a polity to specialize in manufactures rather than raw materials, they did not seek to explain the mechanisms underlying the different economic activities (Hakluyt 1877 [1584], 36–44). Similar sentiments were shared across the Continent. In 1558, Luis Ortiz explored why Spain, in spite of the treasures of the New World, would suffer from exporting its raw materials and importing manufactured goods, and in France Barthélémy de Laffemas, Controller General of Commerce under Henry IV, explained at length through a series of pamphlets why the development of competitive domestic industries was the only way of escaping dependence on, and subsequent subjection to, foreign powers (Ortiz 1957; Laffemas 1597, 17; Laffemas 1602, 123). Germans, Seckendorff echoed in 1665 after a close engagement with Botero's *Reason of State*, 'act wrongly in exporting and selling raw materials only to pay a higher price taking them back as manufactures once people have worked them' (Seckendorff 1665, 188; Reinert 2005). Throughout the early modern period, economic policy – communicated and emulated through an ongoing process of translation and espionage – coagulated around the political need to encourage domestic industry as a means of securing wealth, power and independence (Reinert 2011). At its highest levels of sophistication, this tradition also provided durable explanations for why industrialization was becoming an existential necessity. The one offered by Serra in his 1613 *Short Treatise on the Causes that Can Make Kingdoms Abound in Gold and Silver*

¹⁸ On the institutionalization of these measures see Molà (2007, 533–572) and Franceschi and Molà (2012, 444–466, esp. 458–461).

even in the Absence of Mines – which is the full translation of the original title – rightly became legendary in the history of economic analysis:

In manufacturing activities it is possible to achieve a multiplication of products, and therefore of earnings. The same cannot be done with agricultural produce, which is not subject to multiplication. If a given piece of land is only large enough to sow a hundred *tomoli* of wheat, it is impossible to sow a hundred and fifty there. In manufacturing, by contrast, production can be multiplied not merely twofold but a hundredfold, and at a proportionately lower cost. (Serra 2011 [1613], 121)

The key to Italy's historical success lay in the fact that by providing Europe with manufactured goods in exchange for raw materials, it had harnessed to its advantage the differential returns to scale inherent to distinct economic activities. Serra's argument would become a mainstay of eighteenth- and nineteenth-century political economy, in the different states of Italy and abroad. In fact, his theory provided the theoretical grounding for the early modern transition from reason of state to political economy. A 1764 Venetian review of Italy's first professor of political economy, Antonio Genovesi (incidentally a careful reader of Serra) defined the aims of the new science of political economy in precisely such terms: 'To increase the greatness, power, and wealth of the Nation, without at the same time aiming to enlarge the borders of what one possesses'; a definition which, through its numerous translations across Europe and the New World, came to shape the course of economics (quoted in *Giornale d'Italia*, 21 July 1764, 17). *Grandezza* and empire could be achieved by economic means. Lecturing from his chair of political economy at the University of Naples in the 1750s, Genovesi had indeed programmatically observed that the line separating 'sovereign' from 'servile' states (that is, free from dependent ones) in Europe coincided neatly with that separating exporters from importers of manufactured goods subject to 'multiplication' (Genovesi 1757–1758, 1: 220; 2: 35, 188n).

The development of a hierarchy in the desirability of economic activities is vital for understanding early modern economic relations. In the 1630s, the English director of the East India Company, Thomas Mun, explained the political necessity of moving up the value-chain in this system in terms of shifting from 'natural' to 'artificial' activities (see Mun 1664, 15). This transition, revolving around the development of national manufactures and the seemingly oxymoronic agenda of attaining export-led growth through import substitution, would become institutionalized from England to Gotha and from Bergen to Naples, before becoming a staple of industrial success in the nineteenth and twentieth centuries, from Germany through the United States to the Asian Tigers (Perrotta 1988; E. Reinert 2007; Vietor 2007). But it is important to emphasize that the importance historically allotted manufactures did not, as many will have it, entail a consequent disregard for agriculture. This was even recognized as a 'paradox' by political economists across Europe in the seventeenth and eighteenth centuries. As an anonymous Englishman put it in 1689, 'No places are more frequently afflicted with *Famin*, than those Countries which are employed in *Tillage*', a condition that still happens to be true (Anon. 1689, 29–30; and many others in the subsequent century). Contrary to what physiocracy and its modern eulogists have argued, French agriculture bloomed under Colbert (Rothkrug 1965, 243–244).

Whether one wishes to describe this general process as industrialization, as the

development of activities subject to increasing returns to scale, or in terms of nationalizing the value-added components of goods, is beside the point.¹⁹ What mattered was not that these early political economists formulated theories to justify the development of domestic manufactures in phrases that align with the vocabulary of modern economics – though they sometimes did – but that they understood that certain activities were better than others at producing wealth and thus power, and ultimately liberty and political security.²⁰ These were propensities, tendencies and generally acknowledged best practices stretching across vastly different economic cultures, though seldom a theology of political economy. The politics of early modern international trade, as evident from best-selling works and reigning practices, bottomed out in the realization that economic activities were different and that competition over them not only posed tangible constraints on political life and public happiness but also had to be calibrated and countervailed with active, dynamic policies. For as soon as one power began to conceive of trade as an act of war, others had to follow suit to survive as independent economic and political entities.²¹ As this jealous – sometimes emulative – rivalry developed, however, so did the nature of competition and the policies thought most conducive to succeed in it.

Years ago, the Italian economic historian and prime minister Amintore Fanfani noted that the essence of pre-Smithian economics was dynamic, that it was principally a system of ‘growth’ and ‘development’ rather than ‘stasis’ and ‘equilibrium’. And one should not be surprised that its more philosophical exponents could imagine the gradual overturning of even basic policies with changing circumstances, without this undermining the fundamental ideal of industry safeguarding security independence (Fanfani 1955, 149). Such contextual polyvalence, in other words the need to adapt to changing circumstances, was after all one of the staunchest teachings of reason of state since the time of Machiavelli, if not before (see ‘Il Principe’ in Machiavelli 1971, 281–283; Botero 1589; Serra 2011 [1613], 68, 129; Henri 1640 [1639], 1–2; Hobbes 1995, 65; Plessis 1961, 28; Cary 1695, 51). Vincent de Gournay, one of the driving forces of French political economy on the eve of the Seven Years War, wrote, ‘It amounts to insulting the great Colbert to think that, because he set a few limits to our trade, he intended them to last forever’ (Gournay 2003, 387).²² Gournay here reflected upon a problem at the very center of pre-Smithian industrializing strategies, which in historically successful cases contained the seeds of their own destruction in more ways than one (Reinert and Reinert 2005). He had no doubt, when annotating his 1753 translation of the 1694 tenth edition of Josiah Child’s *Discourse of Trade*, that conquest and commerce went hand in hand: ‘One cannot repeat it often enough, the destiny of commerce and of the arts depending on it will always be like that of war’ (Gournay 2008, 242). If France were to flourish in a hostile world of competing commercial societies, it would have to master both. But the means of doing so were not set in stone. Though Colbert’s policies had been the right in his day and age, Gournay now had to look elsewhere to safeguard France’s continuing power and liberty.

¹⁹ On the appropriateness of employing the word ‘industrial’ to describe manufacturing activities before the ‘Industrial Revolution’ see Poni (2009, 61–62).

²⁰ On the role of the state in industrialization as the key to explaining the great divergence, see E. Reinert (1999), de Vries (2002) and Parthasarathi (2011).

²¹ As eloquently put in the Marquis d’Argenson’s review of Belloni (d’Argenson 1751); see also Reinert (2009) and Findlay and O’Rourke (2007).

²² For what used to be the mainstream interpretation of Colbertism, see Ingram (1888, 41).

As Ferdinando Galiani, known as ‘Il Machiavellino’, echoed Gournay in his extraordinarily influential 1770 *Dialogues on the Grain Trade*: ‘Let us imitate the great Colbert and not follow him. Imitating and following are two very different things, although many people mistake them. Let us do what a good mind like the great Colbert’s would do today’ (Galiani 1770, 17, see also pp. 14, 22, 31, 166, 209, 229, 233, 257–258).

Contexts changed and political economy had to follow suit. For one, successful policies were invariably emulated and countervailed by competitors, an agonistic process further complicated by the fact that an emulatee inevitably changed the conditions for its success in the very process of forging ahead. Secondly, the very measures that protected the industries of a political community from foreign competition, allowed for their initial establishment, and subsidized their penetration of foreign markets might eventually hinder future economic development. As industries matured, they would by necessity reach a point at which further integration with larger markets and more sustained competition became essential for continuing growth.²³ An anonymous eighteenth-century Italian critic of physiocracy put it just this way while observing Europe’s industries on the Grand Tour: ‘Limitations are as damaging to a country after trades have been established, as they are useful to introduce them’ (Anon. 1786, 31). The underlying problems of competitive liberty and development remained, but as economies matured the means of resolving them changed, a transition lost to a modern historiography obsessed with dichotomies and polar opposites like reason of state and political economy, liberalism and protectionism, conquest and commerce. Development would, for many if not most observers in the European world, explicitly continue to be conceptualized as moving through qualitatively different phases. Tench Coxe, one of the architects of the American system of encouraging manufactures in the wake of independence, justified measures such as tariffs and bounties to give ‘new born states the strength of manhood’ and assure their ‘political independency’ (Coxe 1787, 4). Different stages of development demanded different policies; they required politics, an insight brought to its full expression in the nineteenth-century works of infant-industry protectors in the tradition of Friedrich List and John Stuart Mill. ‘Protective duties can be defensible’, Mill argued, exploiting what by then was a venerable trope, ‘when they are imposed temporarily (especially in a young and rising nation) in hopes of naturalizing a foreign industry’ (List 1841; Mill 1848, 2: 487).

Governmental interventions in the economy for the sake of encouraging certain industries and rendering them internationally competitive were explicitly theorized by many to be economic and thus military and, ultimately, political necessities: mandatory passage points on the path to greatness. Many argued that such policies to encourage industry – however draconian in nature – even had empowering civic consequences (Reinert 2011, 286–287). This political consolidation in light of economic competition was also at the center of one of the most tortured and least resolved aspects of ‘the mercantile system’, namely the challenged existence of chartered monopolies and special privileges in the circuitous development of what we have come to know as the modern state.²⁴ The early modern period witnessed a number of sometimes competing actors all able to claim, with

²³ On this classic argument for free trade, see Irwin (1996).

²⁴ On this term’s vicissitudes, see Skinner (2002, 2: 368–413).

variable degrees of coerciveness and evanescence in territories of highly disparate extents, what Carl Schmitt called 'sovereignty', defined as the agency that 'decides on the exception' (Schmitt 2005, 5). That the centralized Weberian state in the end won out – as an ideal if not a reality – has for a long time blinded scholarship to historically competing paradigms, not to mention to the historically contested coexistence of overlapping institutions of power and determinants of political loyalty with very different aims and capacities for governance: local guilds and fraternities; city-states, principalities and parallel traditions of feudal rights; robust empires like the British and ephemeral ones such as the Holy Roman; universal projects like the Counter-Reformation Church and the great trading companies; and non-national forms of imperialism such as the Ottoman Empire. The modern state was not the only one, in this wide spectrum of political constellations, that realized the political importance of economic development, and implemented policies to safeguard power and independence against external competition.

A subsequent confusion arises regarding the dynamic relationship between early modern theories of governance and monopolistic companies. Though the basic economic analysis of the causes of a community's wealth remained remarkably constant in early modern Europe, that of special privileges was completely overturned. Famous authors such as Josiah Child and Charles Davenant could admittedly still argue fervently for the benefits of monopoly and special privilege in the second half of the seventeenth century, but from Hobbes to Seckendorff and Cary to the mainstream of eighteenth-century political economy, guilds and chartered companies were against the principles of 'free trade', understood as the individual's liberty for economic action within the framework given by the state and its collective interests (Reinert 2005, 2011; Seligman 1920, ix). This shift of economic analysis must be understood as part of a larger shift in the accepted parameters of political sociology. Through a complex historical process, there were ways in which the atomization of society encouraging – and in turn encouraged by – the dissolution of guilds and chartered companies in favor of more liberal labor markets assisted in and resulted from the consolidation of a national ideal of sovereignty and locus of political allegiance (Breuilly 1994, 75; Creveld 1999, 201; Kaplan 2001; Pfister 2008). If chartered companies had contributed to a state's penetration of foreign markets and its initial overseas conquests, its further flourishing depended on them being dismantled and brought under centralized control through national endeavors or state-sponsored individual initiative.²⁵ The politics of international trade were dynamic in the early modern world, not only in the policies they inspired but also in the very structures that implemented them. The overarching aims of the mercantile system, understood in terms of industry, power and security, might have been remarkably uniform across early modern Europe, but its ways and means were mercurial indeed.

Enlightenment military theorists from Henry Lloyd to Carl von Clausewitz conceived of war and international trade as different expressions of the same agonistic competition between political communities, in which relative armies, wealth and ultimately power were positional goods (Lloyd 1771; Clausewitz 1989, 149; Clausewitz 1992, 285–303, 292; see also Reinert 2007). Given the imperatives of interregional and

²⁵ Few cases in the annals of history are more explicative of this complex and dynamic interaction of cities, states, empires and corporations than the British East India Company; see Bowen (2006) and Stern (2011). For perspectives see also Findlay and O'Rourke (2007, 240), Greenfeld (2001, 29–58) and Games (2008, 289–299).

international competition, and the high stakes of political survival, there were meaningful ways in which the race to dominate the few staple-trades offering increasing returns to scale at the time – essentially textiles – was in fact a form of warfare. Not everyone could draw in raw wool to export cloth at the same time, which is why it is so striking that even the most bellicose of early modern trade theorists would agree that exchanges of manufactured goods, in which both partners benefited, were ‘good trades’, just as the export of manufactures in exchange for raw materials was (Reinert 2011, 118, n283). What was truly detrimental was to export diminishing-return raw materials to buy back increasing-return manufactures, a pattern of trade that with time would subject a polity to de Jorio’s ‘different kind of empire’ (Jorio 1778–1783, 1: 21). So the policies discussed earlier and the political sensibilities that drove them were not by necessity bellicose, nor did attempts to safeguard liberty through economic policy at the time inevitably foster international aggression. Though they have succeeded in creating large concentrations of wealth and power, how that wealth and power have been employed are entirely different questions to be engaged with on an entirely different level of politics. As Alexander Hamilton put it, championing his own brand of interventionist policies to encourage industrialization: ‘It is one thing for a country to be in a posture not to receive the law from others, and a very different thing for her to be in a situation which obliges others to receive the law from her’ (Hamilton 1795, 36). War was, in short, not the only historical exit for the industrializing policies triggered by jealousy of trade. Indeed, such policies, and the gradual intercatenation of developed polities that might result from them, were at the core of leading nineteenth-century theories of economic nationalism as a necessary step toward a greater union of humanity; a step, in Giuseppe Mazzini’s terms, from an ‘aggregate’ of polities to their ‘association’ (Recchia and Urbinati 2009, 94–95, 125).

Yet, the specter of empire found ever-new ways of haunting the politics of the global economy. With the development of more robust and pervasive financial institutions in the eighteenth century, novel instruments were added to the toolkit of empire that, though intrinsically bound to the historical development of ‘state’ structures, were ultimately able to wrest themselves free of them. Voltaire was among the first to see that the warmongering capacities of an international businessman in financing conflicts and commercializing conquests made him comparable to a ‘Roman citizen’, that wealth could be *virtù*, and that private individuals of means could decide on the fate of nations just as the Roman legionnaires had; soon, however, the observation that there were empires not only of arms and manufactures but also of credit became mainstream (Voltaire 1733, 71; Reinert 2011, 138). Emblematically, the same Voltaire annotated Machiavelli’s dictum from *The Art of War* that ‘it is impossible to wage war constantly; it is impossible to always pay [troops]’ with a pithy ‘*si puo perdio [sic]*’ – by God one can (Machiavelli, *Dell’arte della guerra*, in Machiavelli 1971, 307; Voltaire 1979–1994, 5: 472). Governments, including those of states, had encouraged companies and what were soon to be known as ‘capitalists’ as a means of buttressing their respective communities in international competition, but these had themselves – given the mercurial ways of political economy – matured to become separate if never entirely autonomous actors on the stage of world politics. As Gouverneur Morris wrote to Alexander Hamilton from Paris in the summer of 1792, it was important for the United States to diversify its trade and credit-relations precisely to avoid subjection to the whims of capital. Were the nascent country to become dependent on a single

market and thus ‘confine . . . business to one spot’, he feared ‘Capitalists’, ever one step ahead, would ‘take their measures before hand to give you the law’.²⁶

But beyond individual capitalists, an emerging, amorphous public also came to complicate matters of political economy. ‘Public opinion’, Genovesi thought, was ‘always a great law’, and the Genevan finance minister of Louis XVI, Jacques Necker, tellingly defined it as ‘an invisible power’, one that ‘without treasury, guard, or army, gives its laws to the city, the court, and even the palaces of kings’. Nothing less than an ‘empire of public opinion’, the latter argued, had come into existence, yet another locus of power, and by necessity perpetually contested source of authority and legitimacy, to dispute the politics of trade (Genovesi 1768, 1: 147; Necker 1784, 1: lix, lxi–lxii). And it was the *opinion publique* that eighteenth-century exponents of the liberalizing experiments associated with physiocracy in France blamed for the resistance met with by their proposals (Villeneuve 1763, 59; Le Trosne 1768, 148).²⁷ Not only was more at stake in the politics of trade; its stakeholders were becoming increasingly vocal.²⁸ Early modern political economy was a rich and often hard-headed science of competitively creating wealth while negotiating distinct yet interrelated imperial mechanisms, whether through conquest, commerce, production or capital itself; it operated in relation to what was inherently an almost insuperable tension between what Steven L. Kaplan defined as ‘the marketplace and the market principle’: the market as site(s) and as idea(s) (Kaplan 1984, 31). As such, the long eighteenth century was far more protean than often acknowledged, and it presented its observers and participants with a far richer array of plausible futures than the simple dichotomy between totalitarian planning and self-regulating markets that eventually came to frame our thinking about such matters (Reinert 2010).

The polyvalent power of wealth itself, competed for by warring political interests, was outgrowing the structures installed to nurture and harness it, in the process weaving a peculiarly postmodern phantasmagoria in which the politics of international trade, embedded in ostensibly solidifying Westphalian state structures, could both look back to the chaotic era of largely sovereign merchant companies and forward to the rise of multinationals. The tension between Leviathans and corporations in a global economy of impossible-to-conceptualize complexity remains at the forefront of contemporary debates, suggesting the possibly intermezzate nature of ‘the state’ – looming distortingly large at a particular moment, but brief from a particular perspective – and the comparative longevity of powerful nonstate politico-economic forces. Playing on the term ‘cyberpunk’, used to describe a genre of gritty speculative fiction inaugurated by the violent neo-noir globalist-corporatist aesthetic of Ridley Scott’s 1982 movie *Blade Runner*, we might call this moment ‘baroquepunk’.²⁹ Far from rejecting the importance of the growing literature on the role of the state in historical development, such

²⁶ Gouverneur Morris to Alexander Hamilton, 17 August 1792, in Syrett and Cooke (1961–1987, 12: 220–222). I am grateful to Francesca L. Viano for this reference.

²⁷ Thompson (1971) remains a fruitful starting-point for understanding this resistance.

²⁸ On shareholder and stakeholder capitalism, see Scott (2011).

²⁹ The ‘baroquepunk’ heuristic would bridge the conceptual arc from the early, Thrasymachean chapters of Bown (2009) to Hardt and Negri (2000), by way of Jameson (1990, 38, 419), and of course Gibson’s genre-defining 1984 novel, *Neuromancer* (2000, 196) where we read: ‘Power, in [this] world, meant corporate power. The zaibatsus, the multinationals that shaped the course of human history, had transcended old barriers. Viewed as organisms, they had attained a kind of immortality.’

a perspective serves instead to amplify the significance of governance, indeed of government, for economic life more generally, conceptually connecting the management, administration or statecraft of disparate but interconnected entities ranging from banks and merchant companies to nation-states and empires in the early modern period; all eminently visible hands grasping at the reins of power.

Looking back upon previous periods in his visionary 1840 *The Bankocracy*, the Sicilian nobleman and Fourierist Giuseppe Nicola Corvàia presented a utopian model for global financial reform, delineating the ways in which international relations could now be socialized by essentially turning all countries into technocratic banks. Considering the final convulsions of the Age of Revolutions and Napoleon's gambit for universal empire, Corvàia observed that the 'English aristocracy' alone, hiding behind their 'fortress of credit', had kept him from 'giving the law to the world'. In fact, Napoleon in the end succumbed to that 'omnipotent weapon of credit, which he didn't know how to, and didn't care to, wield' (Corvàia 1840–1841, 1: 46).³⁰ Corvàia observed, with quixotic clarity, that the instruments of empire had changed yet again, and that sovereignty remained ever at stake in transnational economic relations. Everyone, it seemed, might one day be subjected to what soon would be known as 'the empire of capital', contested not only by corporations and political communities but also by actors as diverse as the sovereign bankers of Amsterdam and the global financial network of the Jesuits (Hughes 1844, 56; Petitti 1847, 22; *The Economist* 1875, 1393).³¹ What Corvàia had seen was a world that to our eyes remains strangely familiar, in which shifting constellations of competitors vie for survival and supremacy on the world stage by all means at their disposal: trade, war, opinion and capital remain adjacent facets on the great polyhedron of the Schmittian political, whose aleatory cruelty we seem unable to transcend (Schmitt 2007).

Economic life cannot but be political, a historical datum that has finally caught up with us again. The project for humanity to escape this condition through faith in unregulated market transactions (paradoxically political in its very claim to apoliticality) has, in lived historical time, earned its place among the many failed utopias of political economy, from Tommaso Campanella's 1599 revolt to establish his millenarian republic in Calabria, to Stalinist communism.³² There is dignity to impossible aspirations, but Friedrich Nietzsche had it right: the 'theory' of 'free trade' was, like Kant's moral system to which he compared it, ultimately 'a beautiful, naïve thing . . . presupposing that a general harmony must result of itself according to innate laws of improvement' (Nietzsche 1997, 34–35). Dazed by the fall of ideologies, our only lodestar is and must be history; we must understand the past, the history of business and political economy, on its own terms and, indeed, in its own terms (see, similarly, Pincus 2012). In composing his seminal work on the political history of early modern trade and the mercantile system, the great leader of the German Historical School of economics Gustav von Schmoller could optimistically state: 'The seventeenth and eighteenth centuries created the modern national economies, and . . . the nineteenth has humanized their relations to one another' (Schmoller 1897, 79). Subsequent history gives us reason to be more cynical. Indeed, the horrors of the twentieth century and the harrowing travails of our own time

³⁰ On Corvàia, see Spoto (2009).

³¹ See also Meiksins Wood (2003), Riley (2009) and Clossey (2008, 192).

³² See on these earlier utopias Headley (1997) and Kotkin (1995).

reflect the urgency with which we again, or still, must engage with the politics of the global economy.

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3. Cameralism and the German tradition of development economics

*Erik S. Reinert and Philipp R. Rössner**

Three main elements make the study of the German economic tradition¹ particularly rewarding for development economists. First of all German economics was born late and at a moment when the ‘nation’ – or rather the somewhat awkward-looking confederation of German states that went under the label ‘Holy Roman Empire’ – was particularly backward, poor and ravaged by the Thirty Years War (1618–1648). Secondly, German economics has consistently seen the economy from a different vantage point with different metaphors: essentially from the point of production, rather than trade, and operating on a much lower level of abstraction than today’s mainstream economics and its predecessors. Thirdly, the scope of economics in the German tradition has been much wider than in the Anglo-Saxon mainstream. Factors such as geography and history, technology and technical change, government and governance, and social problems and their remedies – broadly put, culture – have all been central to the approach since its very inception.

The Thirty Years War had cost the lives of up to 70 per cent of the civilian population in some but not all areas. Curiously it was in those regions most ravaged by the war, in the small principalities located in the central German lands around Saxony and Thuringia, that the first prime examples of Cameralist economics emerged, such as Veit Ludwig von Seckendorff’s *Teutscher Fürstenstaat* (1655).

Compared to the richer Northwest, especially the Netherlands and England, most German lands were characterized by low rates of urbanization and comparatively low levels of productivity. This economic divergence had been visible well before the Great War, which only reinforced the German backwardness after 1618. Therefore, from its very inception German economics took the vantage point of a backward nation attempting to catch up with its wealthier neighbours. As opposed to English and United States (US) economics, whose philosophical base changed radically when the nation had reached world economic power, in German economics the elements that made this analysis possible did not change to any large extent as the nation grew wealthier.

A frequent theme in German historical writing is the idea of the country as a *verspätete Nation*: a laggard nation compared to the rest of Europe. In such situations, the state will play a different and more active role than in the more developed nations.² It was therefore only natural that other latecomers – in particular, the United States and Japan – were to build their economic theories and policies on German models. During the nineteenth

* We are indebted to Wolfgang Drechsler, Rainer Kattel and Ingbert Edenhofer for helpful comments on this chapter. The usual disclaimer applies.

¹ In this chapter, the term ‘German economics’ will be used to cover all economics originally written in the German language.

² For a discussion of the role of the state in the German economic tradition, see Reinert (1999).

century, united in a common position against English economics, economics in Germany and the United States strongly influenced and fertilized each other. These catching-up nations united in a common theoretical front against England, a nation that not only made it politically clear that she saw it as a primary goal to prevent other nations from following the path of industrialization, but also – for the first time in the history of economics – possessed an economic theory that made this goal a legitimate one. From a policy point of view the main novelty of the economics of Smith and Ricardo was that they made colonialism morally defensible and that they paid less or even close to no attention to the fact that different economic activities (manufacturing as opposed to agriculture or primary production) are qualitatively different as carriers of economic growth. These activities have different types of scale economies – increasing or diminishing returns – and different potentials for technological change, their markets compete in different ways, and thus have different potentials to raise wages and add value over time; something emphasized in Continental economics since the days of the Italian writer Giovanni Botero (1544–1617).³

The nineteenth century produced important German–American economic exchanges and alliances against English classical economics. Friedrich List, a German political refugee in the United States, was inspired by the visions and arguments of US economists: publications by Daniel Raymond and Mathew Carey in 1820 and 1821 provided List with new ammunition and inspiration.⁴ Later in the nineteenth century, another US–German pair of economists, Henry Carey and Eugen Dühring, supported and defended each other. During the nineteenth century, US and Japanese economists were usually trained in German economics: US economists through their graduate studies at German universities and Japanese economists not only by German economics professors in Japan, but also by a large number of German-trained US professors teaching in Japan.⁵ There were no graduate schools in economics in the United States in the nineteenth century, and most US economists received their PhDs at German universities, as had all the founders of the American Economic Association. Reading knowledge of German was mandatory for economics PhDs in the United States until World War II.

We should not, however, exaggerate the differences between the German economic tradition and that of the rest of continental Europe. In the long term, the most important dividing line is between the English economic tradition and the continental European traditions seen as a whole. The works available in English on the German economic tradition tend to be seen from an Anglo-Saxon viewpoint, where German economics is seen in contrast to the English tradition without recognizing its similarities to the rest of the Continental tradition.⁶ To most historians of economic thought, cameralism – the particular German form of economics – is seen as a German phenomenon only. Most are unaware that both the term ‘cameralism’ itself and the works of the cameralist authors were spread from Sweden and Russia to Spain and Italy.⁷ The textbook written by the first professor of economics outside Germany, Anders Berch in Uppsala (Berch 1747),

³ See E. Reinert’s Chapter 1 in this volume.

⁴ See Reinert (2015).

⁵ See Sugiyama and Mizuta (1988).

⁶ See, for example, Grampp (1993) as well as other contributions in Magnusson (1993).

⁷ See Rössner (2016a, 2016b).

uses the term ‘cameralism’ in its title. The first professorship in economics in Northern Italy, Cesare Beccaria’s in the 1760s, was one in ‘cameral sciences’.⁸

The only two German-language economists broadly studied in the rest of the world – Karl Marx and Joseph Alois Schumpeter – are, in fact, much less original in the context of the German tradition than they appear in the standard historiography of economic thought. Marx and Schumpeter indeed shared a typical ‘German’ view of productive forces bringing about change in society. In his foreword to the Japanese edition of *The Theory of Economic Development*,⁹ Schumpeter stressed the similarities between Marx’s approach and his own, contrasting their approach with Walrasian and Marshallian economics. In the German production-based tradition, capital per se has no value, and this is reflected both in Schumpeter and in Marx. As a result of this, the interest rate under perfect equilibrium in Schumpeter’s system would be zero. This finds its parallel in Marx’s proposition that constant capital does not produce any surplus value. However, these similarities are, according to Schumpeter, ‘obliterated by a very wide difference in general outlook’.¹⁰

Seen from the perspective of German economics, the part of Marx’s work alien to this tradition was his use of Ricardo’s labour theory of value. Marx’s contemporaries among German economists – starting with Eugen Dühring as the first to comment on his work – therefore tended to be sympathetic towards Marx’s economic analysis, but not to his turning the social pyramid upside down as the solution to society’s ills. Still, Marx’s influence on the German economists who followed is clear. In fact, in his book review of Werner Sombart’s main work *Der moderne Kapitalismus*, Gustav Schmoller, the oldest of the giants of the New Historical School, chided his younger colleague for being too much influenced by Marx.

PERMANENT CHARACTERISTICS OF THE GERMAN ECONOMIC TRADITION OVER TIME

It is possible to distinguish an economic tradition in Germany from after the end of the Thirty Years War in 1648.¹¹ Prior to this date, in the tradition of Xenophon, a literary tradition generally labelled *Hausväterliteratur* gave advice on how to run estates, small and large.¹² *Fürstenspiegel* (‘Kings’ Mirrors’), of which the best known is the *Sachsenspiegel* from the twelfth century, are books that collected the laws and customs of the German states. Both the *Fürstenspiegel*, as well as the *Hausväterliteratur* or *oikonomics* – a genre which was by no means exclusively ‘German’ in terms of outlook and approach – naturally also contained remarks and economic models of a more macroeconomic nature. During the 300 years from 1648 until the German tradition of economics dissolved after World War II in 1945, a continuity of principles and approaches can be observed that clearly

⁸ On Beccaria see also the discussion in Harcourt (2011).

⁹ Reproduced in Clemence (1951, 158–163).

¹⁰ Clemence (1951, 161).

¹¹ The early history of economics is discussed more in detail in the Introduction to this volume by the editors.

¹² On the *Hausväterliteratur* from a standpoint of the history of economic doctrine within an ‘alternative’ or Continental tradition, see the lucid remarks in Burkhardt and Priddat (2009).

distinguishes this type of economics both from English economics after 1776 and from today's mainstream economics.

Different types of economics tend to be heavily influenced by the profession from which economists have been recruited. In other words, cultural background matters. English economists were, to a large extent, merchants and traders who brought their professional perspective with them. Adam Smith spent many years as a customs inspector, adding to the commercial bias of Anglo-Saxon economic theory. Indeed, a common German criticism of English classical economics has been that it has reduced the science of economics to catallactics or catallaxy, to a science limited to the study of barter, trade and exchange. German economists, by contrast, tended to be involved in the management of the many small German states. The term 'cameralism' itself originates in the *camera principis*, or *Kammer*, that is, Treasury and Privy Council (*Geheimer Rat*) of the princes that ran each of the 300 or so German states in the early modern period. The perspective of the cameralists was also that of public management, of taxes and institutions, laws and regulations. Their perspective on economic development was therefore very practical and led them to the consideration of production, rather than trade alone, and the optimality of a balance between different economic activities. For example, the need for the creation of a healthy base for taxation would lead them to favour the promotion of manufacturing, often in large workshops with some steps of production being mechanized (called *manufactories* or *Manufakturen*), whose employees would gain a taxable income and whose owners were much better tax subjects than farmers or small artisans. Adam Smith commenced his second magnum opus on the *Wealth of Nations* with a discussion of this very type of 'proto-factory' and its role in the economic process (division of labour; economic specialization), very possibly drawing upon a detailed description with copper engravings of such workshops in the great *Encyclopédie* (1751–1780, 35 vols) by Denis Diderot. But manufactories – in a sense the archetype or Weberian ideal type of rationalized industrial production activity in the pre-industrial age – were very common in the intellectual as well as the productive landscape of continental Europe. Frequently these *Manufakturen* were 'prestige projects' initiated, financed and run by the state; often with an aim of producing luxury items or securing military supplies (arms and uniforms), as in Prussia under Frederick the Great (c.1742–1784). German cameralists or practical economists such as Johann Daniel Crafft or even Johann Heinrich Gottlob von Justi were actively involved in running such businesses.¹³ German economists are, almost to a man,¹⁴ in ardent opposition to the French physiocrats who established agriculture as the only producer of 'net wealth' (see also Chapter 2 by Sophus Reinert in this volume).

The German economic tradition focuses on the state as an important economic facilitator and, in difficult situations, occasionally also as the entrepreneur of last resort (Reinert 1999). Probably also as a legacy of the chaos of the Thirty Years War, a chaos similar to that of Haiti or any other 'failing state' today, pragmatism has called for an orderly environment with the state as a necessary facilitator in order to create individual opportunity and happiness. In this tradition, the state is seen as something through which, rather than against which, individual liberty and progress are gained within the

¹³ On Crafft and Hörnigk, see Rössner (2016b); on Justi, see Reinert (2009) and Wakefield (2009).

¹⁴ The exceptions are August Schlettwein (1731–1802) and Theodor Schmalz (1760–1831), both marginal figures in the history of German economic thought.

framework of a common weal.¹⁵ Through this tradition German economics provides key insights for contemporary economies where the ‘natural order’ is non-productive rent-seeking based on raw materials and/or cheap labour, and where the ‘natural order’ at times is utter chaos.

German economics is above all an *Erfahrungswissenschaft*: a science based on experience. There is little metaphysical speculation and high abstraction, and many considered the economic theories of David Ricardo to be an example of such ‘metaphysical speculations’.¹⁶ *Strukturzusammenhänge* – structural coherence and connections – among economic factors and between the economy and the rest of society are not only obvious, but understanding such connections is also most important for both economic theory and policy. Synergies would be one example of this. Compared to Anglo-Saxon economics, the German approach has therefore always been holistic. Economics was to become an umbrella science over the social sciences. There was only one criterion for what was to be included under the heading of ‘economics’: relevance. To the degree that nutrition might be important to the economy at one point in time, nutrition would be part of economics.

Praxisnähe – closeness to reality – and relevance have been key criteria for academic quality in this tradition. There is also a fundamental understanding that important economic factors are irreducible to mere figures and symbols. A frequent criticism is that standard economics often produces *qualitätslose Größen*, quantities that are devoid of any qualitative understanding. Even the most accurate and comprehensive description of a human being by all of their quantifiable aspects – height, weight, percentage of water and trace minerals – would leave out the key factor in economic development, what Friedrich Nietzsche calls *Geist- und Willenskapital*: the wit and will of Mankind.

As it developed, German economics came to be solidly based on the philosophical foundation of Gottfried Wilhelm von Leibniz (1646–1716) and Christian Wolff (1679–1754),¹⁷ based on the legal tradition of *Naturrecht* or Natural Law. The devastation of the Thirty Years War (1618–1648) created a need for a common basis of law regardless of creed. In the natural ‘uncivilized state’, the Natural Law tradition maintains that Man still has moral obligations, the origins of which are to be found in nature. Modern state theory also emerged in this same period. At the core of the system of Christian Wolff – who came to be the basis of German economics starting around 1750 – rests the presupposition that Man is essentially a social, peaceful and rational being. Related to this is a fundamental belief in Man’s common sense: *der gesunde Menschenverstand*.

Schumpeterian elements are deeply embedded in the German economics tradition. A focus on learning and progress, very clear with Leibniz and Wolff, is based on the *Gottesähnlichkeit* of Man: Man’s near God-like quality of being able to create new things. Being born in the image of God meant that it was Man’s pleasurable duty to invent. At its most fundamental level, the contrast between English and German economics lies in the view of the human mind: to John Locke, Man’s mind is a blank slate – a *tabula rasa* – with which we are born, and which passively receives impressions throughout life. To Leibniz,

¹⁵ We are indebted to Wolfgang Drechsler for assistance in the formulation of this paragraph. A historical argument of the problem can be found in Rössner (2016c).

¹⁶ A very useful discussion of different ways of understanding economic phenomena in German versus mainstream economics is found in Drechsler (2004).

¹⁷ For a discussion of this, see Reinert and Daastøl (1997).

we have an active mind that constantly compares experiences with established schemata, a mind both noble and creative.

The conception of human nature entertained by the cameralists was, according to Priddat's interpretation, somewhat distinct from insular economics – the *Homo imperfectabilis* with their often conflicting or antagonistic and childish desires and neither a good understanding of nor care for the needs of the developmental state as such. Such subjects needed the strong guiding hand of a farsighted and caring autocrat – the Prince, the state – to steer the economy, akin to a big household, into a better schedule of resource allocation. Markets clearing spontaneously to the best outcome (we would say Pareto-optimal resource allocation), something which especially French economists (sometimes called physiocrats) were propagating since the mid-eighteenth century, were as yet – and, it has to be said, ever since (Harcourt 2011) – unknown to this conception, as would be the idea of an economy that would have functioned independently from the state and, worse, as a mechanism that was governed by its own laws of demand and supply and allocation. German economics, since the earliest times, viewed the economy as a living organism. One important conclusion derived from this was that free markets as we know them today (and as pre-classical thinkers knew them) had to be created: they did not exist for themselves, nor did they originate spontaneously.¹⁸

Of Adam Smith's ideas, the one most repudiated by German economists was that Man is essentially an 'animal that has learned to barter'. In the tradition that followed Smith, ideas and inventions have been produced outside the economic system. Karl Menger, the founder of the Austrian School of Economics, dedicated a whole chapter in his *Grundrisse* to refute Smith's view on this point. In the German tradition, including Marx and Schumpeter, the view is that Man is an animal who has learned to invent. Nietzsche later added the point that Man is the only animal that can keep promises and therefore creates laws and institutions. Putting these elements together, we have an impressionistic painting of what differentiates English from German economics: barter and 'metaphysical speculations' on the one hand, and production and institutions on the other.

To sum up, the following elements are the main characteristics that differentiate the German economic tradition from the English tradition, from Gottfried Leibniz and Christian Wolff, via Johann Heinrich Gottlob von Justi and Friedrich List, to the *Verein für Sozialpolitik* (1872–1932) and the Historical Schools:

- Core of theory: man and his needs – *Der Mensch und seine Bedürfnisse*.
- A non-mechanical understanding of the world: qualitative '*verstehen*', as opposed to purely quantifiable '*begreifen*' (Drechsler 2004).
- An activist-idealist approach to economic policy based on morality and ethics, as opposed to a passivistic-materialistic attitude to economic policy (these are Werner Sombart's terms).
- 'History matters': theory and policy must be based on the context and should understand the cumulative mechanisms in economics.
- Technology and new knowledge are the driving forces of the economy.

¹⁸ Priddat (2008), Bowler (2002) and Rössner (2016b).

- Focus on production, rather than trade.
- Economic activities are seen as qualitatively different as carriers of economic growth.
- Economic harmony is man-made, not natural. Passivity is more likely to create 'spontaneous disorder' and market failure, rather than 'spontaneous order'.

CAMERALIST ECONOMICS: FROM VEIT LUDWIG VON SECKENDORFF (1626–1692) TO PHILIPP WILHELM VON HÖRNIGK (1640–1714)¹⁹

Veit Ludwig von Seckendorff (1626–1692) has been called the 'Adam Smith of Cameralism' (Small 1909), and justifiably so. His times were violent and extremely difficult for Germany. The Thirty Years War (1618–1648) was a religious war, initially intra-German (denoting the 'Germany' as marked by the borders of the German-speaking countries within the Holy Roman Empire), which gradually came to involve several European powers at the time, including Spain, France, Denmark and Sweden. The war had no winner, but it became obvious to a number of German intellectuals of the next generation that the real loser was civilized society as such. When Seckendorff was 16 years old, his father – a German in the service of the Swedish army – was executed, beheaded as a supposed spy. When Seckendorff died at the age of 66, the armies of Louis XIV of France had recently utterly destroyed one German state, the Palatinate (*Pfalz*). In between, there were wars with the Turks and two more wars with France that had led to the loss of Strasbourg, where Seckendorff had studied. Cameralism, in our view, cannot be properly understood outside this context of a simultaneous reconstruction of a civilized society and of what would today be called 'failed states',²⁰ states where economic life and basic institutions had to be built virtually from scratch. The 'natural order' of the day was barbarism.

Seckendorff entered the service of another former official in the Swedish army, Duke Ernst of Sachsen-Gotha, called Ernst der Fromme, or Ernst the Pious. Seckendorff loyally identified himself with the common weal of the state he served but was also patriotic about the greater Germany. He is referred to as one of the most learned men of his times; he corresponded with Leibniz, among others, and his high ethical standards made him a prototype for later German bureaucrats.

In 1656, at the age of 30, Seckendorff finished his most important work, and the first book in the literature defined as cameralism proper,²¹ *Der Teutsche Fürstenstaat* (The German Principality). The book became the standard handbook for economic policy in Germany and went through a number of editions over the next 98 years. The *Fürstenstaat* is a kind of 'owner's manual' for a small state. There are accurate descriptions of history, population, economic conditions, administration, school system, law and justice. The

¹⁹ On Hörnigk or Hornick, see Rössner (2016b).

²⁰ On the concept of failed states from an institutional perspective, see Acemoglu and Robinson (2012).

²¹ Dittrich (1974) sees many precursors to cameralism in the sixteenth century, such as Saxon jurist Melchior von Osse, or Johann Kaspar Klock, as does Bertram Schefold, so we may say that Seckendorff was the founding father of cameralism proper. See also the introduction to Klock in Schefold (2009 [1651]).

principles followed in the very successful reconstruction of the state of Sachsen-Gotha and its institutions after the Thirty Years War are described. Seckendorff's approach is clearly a holistic and organic one, where the state is an organism and its common weal can only be understood and described in its totality (*Ganzheit*). Seckendorff's views are similar to those of the Italian economists of the Renaissance. The emphasis on the totality, on *Ganzheit*, was to be a hallmark of German economics and German philosophy for the next 300 years.²²

Seckendorff travelled to the Netherlands, accompanying Count Ernst. The wealth and religious tolerance he observed there made a huge impression on him (Stolleis 1995, 158), prompting him to extend his major work with a set of *additiones* (S. Reinert 2005). Early economic policy in Europe is frequently based on benchmarking and systematic emulation of the successful states – the Netherlands and Venice being the obvious cases – using Spain, with its inflow of gold accompanied by de-industrialization and increasing poverty, as the case to avoid. To Seckendorff, the Dutch appear as 'examples of the wisest and in production and trade [*in Gewerb*] the most experienced people' (Seckendorff 1665). From the Netherlands, Seckendorff understood the crucial need for manufactures, and also the need to cluster economic activities, both arguments that Antonio Serra had already raised at a theoretical level in 1613.²³ Seckendorff's economic measures included the promotion of manufactures and the resettlement of artisans from the countryside to the cities, where they were likely to make much better livings. This was a notion already to be found in Book 8 of Giovanni Botero's *Ragione di Stato*, which was originally part of his other opus *Delle cause della grandezza delle città* (Botero 1588) but which was from 1589 included in the *Reason of State*. We find this idea lingering in numerous other books circulating in seventeenth-century Europe, such as the *Bedencken von Manufacturen* attributed to Saxon cameralist, entrepreneur and project-maker (*Projektemacher*)²⁴ Johann Daniel Crafft in 1683. From this argument Hörnigk took off a year later with his magnum opus on *Österreich über alles wann es nur will* (1684).²⁵ As many others before and after him, Seckendorff promoted the extension of agriculture and activities adding value to the produce of the land. Seckendorff also eased the mobility of labour by eliminating fees required for settlement and resettlement. With him, we also find the origins of the welfare state, of care for the poor and of government responsibility for the care of the elderly; as well as the modern notion of the free market, that is, a market free of asymmetries and barriers to entry, either by cartel or by some form of monopoly held by some incorporation or groups of society. In his wish to limit the powers of the guilds, Seckendorff thus showed liberal tendencies well ahead of his times.

Seckendorff's policies are to a large extent to be reflected in von Hörnigk's *Principles* or *Hauptreguln* of successful economic development published 18 years later (Rössner 2016b), which we shall discuss in detail below. Seckendorff thus prefigured, in the late

²² Othmar Spann (1878–1950) represented an extreme case of 'holistic economics'. See also discussion in Rössner (2015).

²³ See Chapter 1 in this volume by E. Reinert.

²⁴ Cameralist economists were often engaged in practical ventures in the service of the Prince. The somewhat derogatory term used about them at the time was '*Projektemacher*'. These adventures not unfrequently led to jail terms for even the most theoretically respected cameralists (Reinert 2009). See Sandl in Rössner (2016a), as well as Wakefield (2009) for a socio-cultural perspective.

²⁵ Rössner (2016b).

seventeenth century, what Albert Hirschman later called ‘a multi-level conspiracy for development’. Seckendorff is an early proponent of a school of economists and political writers who were to dominate Europe in the next century, writers who convinced the kings and rulers that their right to rule a state or a country also entailed a duty to develop that state. The thirteenth-century idea of a common good – originating in Italian humanism – was slowly being transformed into an idea of public happiness, and the ruler was put in charge of the project. Wilhelm Roscher coined the descriptive term ‘enlightened despotism’ for this kind of rule (Roscher 1868, 77), but rather than referring to this in pejorative terms (which calling something ‘despotism’ ultimately adds up to), we should remember that within the given legal, institutional, political and cultural framework it was highly unlikely that leaving this to the forces of the ‘free market’ would cause a comparatively good or even better outcome.²⁶

The enlightened ruler – the ‘Philosopher-King’ in Christian Wolff’s terms – was in charge of this ‘developmental dictatorship’, and the job taken up by the cameralists following Seckendorff was to advise, assist, guide, correct, flatter and cajole the rulers into doing their jobs properly. The logic that emerged was: the better the ruler, the wealthier the people. Instead of judging his success by his own wealth, the ruler’s success will be based on the wealth and happiness of his people.²⁷

An early cameralist was Johann Joachim Becher (1635–1682), whose varied career was to match that of the ‘economist adventurers’ of the next century. Here, however, we concentrate on Becher’s university companion and brother-in-law, Philipp Wilhelm von Hörnigk (1640–1714), who delivered the economic policy measures in the most succinct way (Rössner 2016b). Like Johann Heinrich Gottlob von Justi in the next century, Hörnigk was a German-born economist, in the service of Austria for part of his life. Hörnigk’s book *Österreich über alles, wann es nur will* (Austria supreme, if it so wishes) was published anonymously in 1684 and was the most successful German-language economics book of the period. Like Seckendorff, Hörnigk corresponded with Leibniz, the famous, practically inclined philosopher of the time. Hörnigk’s economics was ‘reality economics’, based on intensive studies of the actual situation in the country. His 1684 book reached 18 editions and remained in print for a full 100 years (Carpenter 1975, 10; Reinert and Carpenter 2016). The centenary edition was published in 1784 under the title *Bemerkungen über die österreichische Staatsökonomie* (Remarks on the economy of the state of Austria). In this edition, it is claimed that Austria can thank Hörnigk’s book for most of her wealth.

As in the case of Seckendorff, understanding Hörnigk requires understanding the setting. As with Seckendorff, civilization, as it was known then, was under threat. Just one year before the book was published, the Turks had ended one of several unsuccessful sieges of Vienna. Austria suffered great famines in 1648–1650, 1692–1694, 1698–1702 and 1712–1713 and devastating plagues in the 1630s, 1650s and 1680s. These were indeed challenging times for Austria.

Hörnigk distrusted the merchants and complained about unemployed capital: that wealthy people who had the funds to invest, did not do so. That money was invented in

²⁶ Rössner (2016a, 2016b, 2016c) and Harcourt (2011).

²⁷ An example of an English translation of a German book on this subject is Christian Wolff (1750).

order to circulate is an argument that goes back at least to the writings of Nicolas Oresme (1320–1382). Hörnigk recommended a very different shock therapy from that of today's economists and the Washington Consensus: the complete prohibition of luxury goods from abroad should prompt the rich to invest in national manufacturing.²⁸ Like William Petty in England at that time, Hörnigk was an early proponent of 'political arithmetic'. Among other things, he calculated the income from artisans in a successful Dutch city.

We shall summarize Hörnigk's 'Nine Points of Economic Policy' and briefly comment on the circumstances in which such policies – today most unusual – would be appropriate and efficient. Hörnigk's recommendations are representative not only of German economic policy both then and later, but also of principles that, to varying degrees, were typical of Europe's way out of underdevelopment.²⁹

Hörnigk's first point is

to inspect the country's soil with the greatest care, and not to leave the agricultural possibilities of a single corner or clod of earth unconsidered. Every useful form of *plant* under the sun should be experimented with, to see whether it is adapted to the country.

In this type of economic theory famous for its supposed bias towards manufacturing, it is most interesting that the first reference should be to agriculture. Agricultural productivity advanced extremely slowly for centuries, so typically the economists of the day saw only one way to raise production, namely by extending the arable area through the draining of marshes and so on. Most interesting is the 'Schumpeterian' element of introducing new crops.

Second,

all commodities found in a country, which cannot be used in their natural state, should be worked up within the country; since the payment for *manufacturing* generally exceeds the value of the raw material by two, three, ten, twenty, and even a hundred fold.

Unemployment and underemployment represented huge problems at the time, and this 'multiplier effect' of manufacturing is commonly found, both as regards value added and as regards employment. A very early instance is Minister of Finance Fernando Ortiz's memorandum to the King of Spain in 1558.

Third:

for carrying out the above two rules, there will be need of people, both for producing and cultivating the raw materials and for working them up. Therefore, attention should be given to the population, that it may be as large as the country can support, this being a well-ordered state's most important concern, but, unfortunately, one that is often neglected. And the people should be turned by all possible means from idleness to remunerative *professions*; instructed and encouraged in all kinds of *inventions*, arts, and trades; and, if necessary, instructors should be brought in from foreign countries for this.

²⁸ At the time the intense debate over the morality of having luxury goods when so many people were poor was frequently solved by arguing that luxuries were acceptable as long as producing them gave employment to poor fellow countrymen, not to foreigners.

²⁹ This part of Hörnigk's book was translated by Arthur Monroe (1930).

Fourth, once in the country, gold and silver:

whether from its own mines or obtained by *industry* from foreign countries, are, under no circumstances to be taken out for any purpose, so far as possible, or be allowed to be buried in chests or coffers, but must always remain in *circulation*; nor should much be permitted in uses where they are at once *destroyed* and cannot be utilized again. For under these conditions, it will be impossible for a country that has once acquired a considerable supply of cash, especially one that possesses gold and silver mines, ever to sink into poverty; indeed, it is impossible that it should not continually increase in wealth and property.

The emphasis on gold and silver was what mainstream history of thought had told us to expect, an emphasis supposedly exposing the ‘primitiveness’ of these theories. However, see Perrotta (1991), Grampp (1993), Magnusson (1993, introduction) as well as Rössner (2015) for an alternative view.

Therefore, fifth,

the inhabitants of the country should make every effort to get along with their domestic products, to confine their luxury to these alone, and to do without foreign products as far as possible.

As Perrotta (1993) and others have argued, import substitution was a key aspect of mercantilism. The first, and hugely successful, such import substitution strategy was the English ‘Tudor Plan’ from 1485 to 1603 (Reinert 2007, Ch. 3).

Sixth,

in case the said purchases were indispensable because of necessity or *irremediable* abuse, they should be obtained from these foreigners at first hand, so far as possible, and not for gold or silver, but in exchange for other domestic wares.

This is the clearing system that was also operating in Europe in the years after World War II, in order to avoid balance-of-payment deficits.

Seventh,

such foreign commodities should in this case be imported in unfinished form and worked up within the country, thus earning the wages of *manufacturing there*.

The multiplier mechanism of manufacturing applies both to the value-added effect and the employment effect, and additionally solves balance-of-payments problems.

Eighth:

opportunities should be sought night and day for selling the country’s superfluous goods to these foreigners in manufactured form, so far as this is necessary, and for gold and silver; and to this end, *consumption*, so to speak, must be sought in the farthest ends of the earth, and developed in every possible way.

The ‘cult of export’ was not invented by the Washington Consensus. This is another way of improving balance-of-payment deficits endemic to poor countries, where Keynesian measures alone may only suck in imports.

Ninth:

except for important considerations, no importation should be allowed under any circumstances of commodities of which there is a sufficient supply of suitable quality at home; and in this matter neither sympathy nor compassion should be shown foreigners, be they friends, kinsfolk, *allies*, or enemies. For all friendship ceases, when it involves my own weakness and ruin. And this holds good, even if the domestic commodities are of poorer quality, or even higher priced. For it would be better to pay for an article two dollars which remain in the country than only one which goes out, however strange this may seem to the ill-informed.

This sums up the value-added, employment and balance-of-payment arguments, arguments also presentable in a neoclassical analysis of production possibility frontiers: as long as a country produces inside the production possibility frontier – as long as labour or capital is unemployed – import duties can be defended.

THE EIGHTEENTH CENTURY: THE BIRTH OF ACADEMIC ECONOMICS AND OF SPECIALIZATION IN THE FIELD

The eighteenth century, the ‘Age of Enlightenment’, was characterized by a considerable literary production, including in the cameralist sciences. The *Bibliographie der Kameralwissenschaften* – the main bibliographical source – lists 14040 items, with some duplication, over 1184 pages (Humpert 1937), the majority published in the eighteenth century. Johann Heinrich Gottlob von Justi (1717–1771), the most influential German economist of the century, was also the most prolific writer among the economists, with a total of 67 published books (E. Reinert and H. Reinert 2009). Thirteen different contemporary translations were made of eight of Justi’s books into five different languages.

This was also the century of the first economics journals, mixing practical advice, theory and news on the whereabouts of economists, in typical cameralist style. The best-known German economists of the time, Justi, Georg Heinrich Zincke (1692–1769) and Johann Beckmann (1739–1811), published their own journals, sometimes referred to as *Intelligenzblätter*: periodicals issued weekly or monthly containing a wealth of practical day-to-day and hands-on economics made for enlightening a mostly agrarian populace towards an enlarged knowledge base, better practices and ultimately generating productivity increase. Practical works on agriculture, arts, inventions and manufacturing also abounded all over Europe at the time. In addition to being an age of discoveries, the eighteenth century was an age of science and scientific academies, with the foundation of the large museums in Europe.

The world’s first two professorships in economics (and cameralism) were established in Germany in 1727, about a century before the first such professorship in England. The first professorship in economics outside Germany was in Uppsala in Sweden with a chair in cameralist or ‘state economics’ and *jurisprudentiae oeconomiae* established at Uppsala University under Anders Berch in 1741. The next countries to follow were Finland (then part of Sweden), at the Åbo (Turku) Academy; then Austria, where Johann Heinrich Gottlob von Justi was named professor in the cameral sciences in 1752 in Vienna; and Italy, where Antonio Genovesi was appointed professor of political economy at the University of Naples in 1754.

Since the early 1970s Kenneth Carpenter, a librarian at Harvard University, has collected large amounts of material documenting the translations of economics books in Europe before 1850. Carpenter describes a pattern of frequent translations between continental European languages, but less frequent translations to and from English.³⁰ The material is not yet fully systematized, but the section on Sweden – which is finished, but remains unpublished – shows that out of 207 economics publications translated into Swedish before 1850, 84 were from German, 55 from French and 51 from English. The rest were from Danish and from multi-lingual sources. The widespread myth, of English origin, that German economics has been the isolated ‘odd man out’ in the history of economic thought seems to be thoroughly unfounded.³¹

Johann Heinrich Gottlob von Justi was probably the most representative German economist of the period. He was both a synthesizer and a modernizer of the German tradition, absorbing the important novelties of the 1700s into the consensus of the late 1600s. One example of a new institution was fire insurance. Perhaps the most important novelty of the century was the discovery of important synergies between manufacturing and agriculture. By promoting manufacturing, one would not be punishing agriculture, but quite the contrary. Later Friedrich List, in his *Das Nationale System der politischen Ökonomie* (1841), argued along similar lines. All economic sectors should be promoted and advanced; however without a sound development in industry any effort in any other sector of the economy directed at raising productivity and value-added would have to remain futile. The segmentation of the field of cameralism into subfields, with their own publications and textbooks, was a sign of a maturing science turning into something that came close to a ‘closed theory’ and a fully accredited academic discipline. Justi himself wrote a book on the theory of finance (for a list of his works on economics, see Reinert and Carpenter 2016), and his 1754 inaugural lecture as professor of the cameral sciences in Vienna was about the relationship between science and economic welfare, a theme that was to be the subject of a book by Johann Gottfried von Herder (1744–1803) some 20 years later.³²

Geography had been an important element in continental European economics since the books by Giovanni Botero (1588) and Antonio Serra (1613). From the eighteenth century on it became fashionable to describe economics in stages, from hunting and gathering to herding, agriculture and, finally, agriculture and manufacturing (Reinert 2000). Justi placed these historical stages on a geographical plane using concentric circles, placing the urban increasing returns sector at the centre. This is the tool normally attributed to Johann Heinrich von Thünen (1783–1850). Like Botero and Johann Daniel Crafft (see above), Justi and Thünen thoroughly understood the importance of economic geography and the nurturing and protection of manufacturing areas, both geographically and economically the core of any nation-state (Reinert 2009). When one German economist stated, ‘It is known that a primitive people does not improve

³⁰ Preliminary results are published in Carpenter (1977).

³¹ This point is also forcefully made by Spanish historian of economic thought Ernest Lluch (1996, 163–75). See contributions in Rössner (2016a), as well as S. Reinert (2011a).

³² There is a profound difference between the first industrial revolution in England – mainly carried through by individual entrepreneurs and inventors – and the early integration between science and industry found in Germany. In the second industrial revolution this was to reflect favourably on Germany’s ability to catch up with Britain.

their customs and institutions, later to find useful industries, but the other way around' (Meyen 1770, 11) – the core of the economic strategy later ascribed to Friedrich List (1789–1846) – he expressed something which could be considered the common sense at the time.

Also, technology had always been an integrated part of cameralism, and in the 1770s, from economics professor Johann Beckmann at the University of Göttingen, the world got its first economics textbook focusing on technology. Also Beckmann built on Justi's foundations, publishing a third edition of Justi's two-volume book, on *Factories and Manufacturers*.

Johann Friedrich Pfeiffer (1718–1787) wrote a successful cameralist textbook (Pfeiffer 1764–1765/1777–1778), and also a very early history of economic thought covering about 30 authors – German, French, English and Italian – in six volumes (Pfeiffer 1781–1784). As previously mentioned, virtually all German economists were opposed to physiocracy, and Pfeiffer provided a systematic theoretical refusal of physiocratic doctrines in a book entitled *The Anti-Physiocrat* (Pfeiffer 1780).³³

Joseph Schumpeter compared German mercantilism with English classical economics succinctly:

He [Justi] saw the practical argument for laissez-faire not less clearly than did A. Smith, and his bureaucracy, while guiding and helping when necessary, was always ready to efface itself when no guidance or help seemed needed. [Schumpeter's footnote here: 'This was not merely a dream. It will be pointed out below that the bureaucracy in the typical German principality actually tried to behave like this.'] Only he saw much more clearly than did the latter all the obstacles that stood in the way of its working according to design. Also, he was much more concerned than A. Smith with the practical problems of government action in the short-run vicissitudes of his time and country, and with particular difficulties in which private initiative fails or would have failed under the conditions of German industry of his time. His laissez-faire was a laissez-faire plus watchfulness, his private-enterprise economy a machine that was logically automated but exposed to breakdowns and hitches which his government was ready to mend. For instance, he accepted as a matter of course that the introduction of labour-saving machinery would cause unemployment: but this was no argument against the mechanization of production because, also as a matter of course, *his* government would find equally good employment for the unemployed. This, however, is not inconsistency, but sense. And to us who are apt to agree with him much more than we do with A. Smith, his (Justi's) vision of economic policy might look like laissez-faire with the nonsense left out. (Schumpeter 1954, 172)

THE 'HISTORICAL SCHOOLS' OF THE NINETEENTH AND TWENTIETH CENTURIES

After an initial period of resistance to the ideas of David Ricardo and English economics, the 1830s and particularly the 1840s saw very strong growth in belief in the merits of laissez-faire capitalism. This period has a lot in common with the triumphalist period following the fall of the Berlin Wall that came to characterize the 1990s. This first period culminated in the repeal of the Corn Laws in England in 1846, when the English for a while extremely skilfully managed to convince the rest of the world no longer to protect

³³ See also S. Reinert (2011b) in Backhaus (2011), *Physiocracy, Antiphiysiocracy and Pfeiffer*.

its manufacturing industry, by no longer protecting their own agriculture. There are many parallels between the 1840s and the period in which we now live: never since, until now, has blind faith in the virtues of free markets dominated academia and policy-making to such an extent. The route from the overwhelming social problems of the mid-nineteenth century to the national welfare states that were to follow decades later therefore contains clues on how contemporary problems, this time on a global rather than a national scale, can be handled.

Perhaps the most essential feature of mercantilist economic policy was to diversify the economy away from agricultural monoculture into diversified manufacturing. Protecting agriculture would mean protecting the old feudal order one wished to get rid of. The English bluff – stopping the protection of agriculture in order to convince the rest of the world to stop protecting manufacturing industry – would easily have been called by the great Continental economists of the eighteenth century; by a Montesquieu in France, by a Galiani or a Genovesi in Italy, or by a Justi in Germany. The same would have been true for the economists of the preceding seventeenth century, to whom the proposal would have appeared even more ridiculous. From 1820 onwards, however, resistance to Ricardian economics was not to come from Europe, but from the United States, with important policy-focused publications by Daniel Raymond and Mathew Carey in that same year, and important theoretical work against Smithian economics by John Rae in 1834. In Europe during this period, there was mainly one lone voice speaking against the economic policy of liberalism and peripheral de-industrialization: Friedrich List (1789–1846). Once a US citizen, List was clearly inspired by the arguments put forward by Daniel Raymond, a Baltimore lawyer (Reinert 2015).

List himself had been converted from a free trader to one who saw the need to protect agriculture after he saw the devastating results of de-industrialization in France following the fall of Napoleon. Ninety per cent of what Friedrich List wrote was never translated from German into other languages, so the very strong opinion most mainstream economists have of List is generally narrowly based. List tells us the way things work, but does not, however, generally tell us why; perhaps this was, at his time, still so much common sense that contemporary academics would not spill any ink on elaborating such a point any further. He convincingly argues that the cultivation and protection of agriculture will not yield the same results as the protection of manufacturing (Reinert 1998). He tells us that the producers of olive oil will be poor in the absence of manufacturing; but again, not really why. With some justification, he may therefore be criticized as a theorist. List's policy recommendations were very good, and his feel for the right historical sequencing of policy measures is probably unique, but compared to an Antonio Serra, he failed to explain their underlying mechanisms. Only the later German Historical Schools in economics would recommence on detailed scientific analyses of the axioms and circumstances that had formed the cornerstone of Continental economics between the early sixteenth and late eighteenth centuries, especially cameralism. List's theoretical concepts are vague, or as Werner Sombart said about him: 'His concepts levitate like undelivered souls on the banks of Hades' (Sombart 1928, 929). However, his holistic vision of the synergies of economic development and national wealth creation, products of increasing returns activities and of heavy investments in infrastructure, as the driving forces behind national wealth creation is almost unprecedented.

From a German economic vantage point, and in principle, Friedrich List was the great free trader who forged the German customs union, the *Zollverein*. To the rest of the world he is seen as the great protectionist. But we must acknowledge that List differentiated: he favoured free trade in principle but only amongst nations and economies that were equal or comparable in terms of total factor productivity and competitiveness. To a backward country or underdeveloped economy, however, free trade, especially the abolition of import duties on manufactures, was bound to have the most detrimental effect. List was also the first to have a vision of a European common market. Most economists today fail to understand how one can be protectionist in one context and a free trader in a different context. List's vision of global free trade is desirable only after every nation has achieved a comparative advantage in increasing returns activities. Only when the asymmetries of colonial and neo-colonial trade have been eliminated will all parties benefit from free trade. List's vision is fully consistent with the European mercantilist mainstream of the preceding 300 years, and with Serra's theoretical explanation.

Historically based and context-specific economic theories were to dominate German economic theory from around 1850 for the next 100 years. This period is normally divided in three: into the 'older', 'younger' and 'youngest' historical schools.³⁴ As has also been suggested by others, it is convenient to treat List as representing a 'proto-historical school', but we may really, in the same right, call him a late mercantilist or cameralist to the same result; this all amounts to mincing words. List raised the Italian arguments, from Botero and Serra to Galiani, that the cities and their manufacturing activities are the keys to personal freedom, to the arts, to the division of labour, and indeed to civilization itself. A point made by German economists as early as Leibniz, and so masterfully restated by Galiani, was repeated by List, who insisted that manufacturing was also the key to creating wealth in agriculture, 'the only way to liberate agriculture from its chains'.

The first shot in the long fight between the German historical schools and English classical economics was fired in the same year, in 1848, by a book by Bruno Hildebrand (1812–1878). A few years later, Karl Knies (1821–1898), perhaps the most underrated of these economists, presented his theoretical work on the historical method in economics. Knies inspired the most prominent and influential economist in the United States at the turn of the nineteenth century, Richard Ely (1854–1943), a founder and then president of the American Economic Association from 1899 to 1902, at the time classified as a 'Christian socialist'.

In 1886, another influential US economist inspired by German economics, Edwin Seligman (1861–1939), was to outline the programme of the German Historical School as follows. For Seligman (1925 [1886], the school:

1. Discards the exclusive use of the deductive method and stresses the necessity of historical and statistical treatment.
2. Denies the existence of immutable natural laws in economics, calling attention to the interdependence of theories and institutions and showing that different epochs or countries require different systems.
3. Disclaims belief in the beneficence of the absolute laissez-faire system.

³⁴ See Wolfgang Drechsler's Chapter 5 in this volume for a more detailed discussion.

4. Maintains the close interrelations of law, ethics and economics, and refuses to acknowledge the adequacy of the presumption of self-interest as the sole regulator of economic action.

In fact, Gustav Schmoller, a towering figure and arguably the most important proponent of the younger historical school, drew an even longer line of continuity, stating that:

As recently as thirty years ago no one would have objected when John Baptist Say denied a history of political economy its relevance by saying that it was 'nothing more than a compilation with mixed success of past attempts during various times and locations at finding and collecting the eternal economic truths. What help would it be to collect old vulgar and tasteless opinions and theories that had rightly been refuted? Tracing them would be as useless as it would be boring.' This uttering was the expression of a simple consequence of the prevailing idea that current economic theory would have universal currency as an inherent truth, detached from its historical context and conditions of space, time and nationality; a sum of truths and laws derived purely from principles of reason, from which our ancestors had been precluded but which – once they had been discovered and fully developed – would attain universal truth for all times and peoples as a closed theory . . . The sixteenth century Reformation had to precede the steam engine of the eighteenth and nineteenth century and the development of economics as a separate science. In fact, the German Reformation is the intellectual and necessary predecessor not only for Hegel and Kant but – paradoxically as it may sound – for Adam Smith and all the great inventive geniuses of the mechanical age also.³⁵

Key members of the 'older' Historical School were Hildebrand, Knies and Wilhelm Roscher (1817–1894). Key members of the 'younger' Historical School included the above-mentioned Gustav von Schmoller (1838–1917), but also Adolph Wagner (1835–1917), Lujó Brentano (1844–1931), whereas the 'youngest' Historical School is normally represented by Werner Sombart (1863–1941) and Max Weber (1864–1920). The foundations for Schumpeterian economics were also laid by the Historical School. Schumpeter's best-known concept in economics, 'creative destruction', was first used by Werner Sombart, who was heavily influenced by Friedrich Nietzsche.³⁶ In the next section, we discuss the policies emanating from this school of economics.³⁷

THE SOCIAL PROBLEM AND THE *VEREIN FÜR SOZIALPOLITIK*

Ricardo, and still more those who popularised him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis in social speculations, from the failure to appreciate the limited applications to actual affairs of a highly artificial and arbitrary analysis. His ingenious, though perhaps over-elaborated reasonings became positively mischievous and misleading when they were unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which they were founded. (H.S. Foxwell, Professor of Economics, Cambridge University; Foxwell 1899)

³⁵ Schmoller (1860, 471, 716). Quote translated from German original.

³⁶ See E. Reinert and H. Reinert (2006).

³⁷ For a discussion of the Historical School, see also Shionoya (2001).

1848 was also, of course, the year that saw the publication of *The Communist Manifesto*. This period represented a backlash against Ricardian and laissez-faire economics. In all European languages, 'the social problem', which had lingered under the surface ever since the end of the Napoleonic Wars, suddenly surfaced with incredible vigour and produced political revolutions across Europe as well as a lot of literature on the subject. But, as Galiani had so eloquently pointed out 70 years before, Mankind is a great connoisseur of effects, but a poor judge of causes. In our view, Professor Foxwell's comments about Ricardo anticipate what Schumpeter was later to call the 'Ricardian Vice' of economics.

The reaction of German economists to this challenge is slightly obfuscated by frequent mention of three overlapping categories or groups of economists: (1) the German Historical School; (2) the *Kathedersozialisten* (Socialists of the Professorial Chair); and (3) the *Verein für Sozialpolitik* (Association for Social Policy). This requires some clarification.

The 'German Historical School' is a term later introduced to refer to these generations of German mainstream economists. *Kathedersozialist* is a somewhat unfortunate term imposed on a group of economists by a contemporary journalist, in the same year in which the majority of them founded the *Verein für Sozialpolitik*. The first term used by the journalist was 'freshwater sailors', a derogatory term employed by European sailors about colleagues who thought they were sailors but had never experienced 'the real thing', that is, the reality and perils of the oceans (Oppenheim 1872). The intent was the same: these economists were accused of trying to improve the real world without having much experience of it themselves. Compared to Ricardian economics, however, these economists were much closer to analysing 'the real thing', the context and reality of economics. Compared to English classical economics, Ricardo was the 'freshwater sailor' in a sea of arbitrary assumptions, while the *Kathedersozialisten* were attempting – successfully, in the long term – to tackle the world 'as it really was'; an outlook and approach that would also become a theoretical cornerstone of the co-emerging 'historical school' in the historical sciences at the same time, marked by its towering figures Leopold von Ranke (1795–1886) and Johann Gustav Droysen (1808–1884).

Probably a quote from Gustav Schmoller's opening speech at the founding meeting of the *Verein für Sozialpolitik*, in a private home in Eisenach on Sunday, 6 October 1872, best explains the background for its creation:

The deep cleavage in our society separating entrepreneurs and workers, owning and not owning classes, represents a threat of a social revolution. This threat has drawn closer. In wide circles there have been serious doubts whether the economic doctrines which dominate on today's market – and which were expressed at the Economic Congress – forever will keep their dominance. Will the introduction of the free right to carry on business [*Gewerbefreiheit*] and the elimination of all mediaeval legislation on guilds really create the perfect economic conditions that the hotheads [*Heißsporne*] of that tradition predict?

It was the original *Verein für Sozialpolitik*, active from 1872 to 1932, that was to build the theoretical and practical foundations of twentieth-century European welfare states. The Scandinavian welfare states, which were to become the most prominent, took over, adopting not only many German institutions, but often also their names in literal translation. Significantly, the *Verein* ceased to exist the year Hitler came to power, but its work had also largely been completed by then.

The creators of the welfare state then were economists whose common trait was that they were anti-Ricardian, people who disliked communism just as much as they disliked economic liberalism. However, once these economists, their theories and political opinions are studied carefully, they come across as a very diverse group. The question that arises is how a group with these differences managed to be so productive and to create, amongst their wide-ranging academic publications of deep intellectual insight and cornucopious set of topics studied, so many new institutions and social reforms. The *Verein* continued a tradition starting with Seckendorff and Leibniz, producing what to modern economists would look like microscopic analyses of economies and economic history. From the accumulation of such micro-data, context-dependent policy conclusions were drawn at a high level of abstraction. The method of the historical school can be compared with the case-study method of the Harvard Business School at a national, rather than a company level. The case method was established by that school's first dean, an enthusiastic student of Schmoller, Edwin Gay (1867–1946), whose own studies of economics and economic history in German-speaking Europe spanned more than 12 years.

One important element that kept the *Verein* together was a common research agenda, around which facts were gathered from all regions of German-speaking Europe, with papers written and presented at their annual meetings. One year they would discuss problems caused by the lack of health insurance; another year how to create a system protecting workers from unemployment; and the next year the consequences of 'Fordist' mass production. One fascinating issue of the time was how to address the poverty of those areas specialized in economic activities that had not been mechanized and/or that remained highly intensive in unskilled labour. The 'home workers', *Heimarbeiter*, were mostly paid by piece. Such specialization in 'unmechanizable' production, bereft of scale effects and untouched by the ruling techno-economic paradigm, clearly parallels today's *maquilas* (low-tech assembly plants). However, unlike the Mexican *maquila* workers of today, these workers were theoretically free to move to other more industrialized areas in Germany at the time.

It has been argued that the *Verein für Sozialpolitik* rarely disagreed with the imperial economic policy of Bismarck, implying that they were uninfluential or puppets of the regime. In our view, causality runs the other way: Bismarck's economic policy rarely disagreed fundamentally with the views of the *Verein*. Bismarck understood social reality and problems, and he also understood that the liberals had no cure, and therefore relied heavily on the recommendations of the *Verein*, which – as noted earlier – covered an unusually wide political spectrum.

As we saw, the scholarly output of cameralism was enormous, as was the scholarly production of the next century of German economics, particularly during the century following 1848. The papers and reports of the *Verein für Sozialpolitik* conferences fill 188 volumes and occupy 5 metres of shelf space. The first century of *Schmoller's Jahrbuch*, the most influential journal of the same group of economists, from 1871 to 1971, fills almost 7 metres of shelf space. In addition, there were literally dozens of other journals and an enormous number of books and monographs. We do not have to accept the neoliberal claim that 'there is no alternative'; here lie the bases for a full-fledged alternative to neoclassical economics, unfortunately locked in a language that was once the lingua franca of economics, but which today is, for some reason or another, relatively

inaccessible to most academic economists, somewhat ironically including academics working within German-speaking universities whose curricula have, with few exceptions, been thoroughly ‘Anglo-Saxonized’ for the best part of the last century.³⁸

The famous *Methodenstreit* between German and Austrian economists, a kind of civil war inside German-language economics, started in the 1880s between Gustav Schmoller and Carl Menger.³⁹ Viewed from today’s vantage point, this occasionally vitriolic academic discussion was essentially a quibble over details. Carl Menger, the academic who supposedly argued against the use of history in economics, argued: ‘A highly developed theory of economic phenomena is inconceivable without the study of economic history’, ‘No reasonable person conceals the importance of historical studies for research in the field of political economy’, and ‘history is indispensable for theoretical economics’. Schmoller and Menger agreed that both induction and deduction were needed as scientific approaches or methodological paradigms, and the *Methodenstreit* was seemingly about who was to be in the driver’s seat: which of the two was going to be the ‘main science’ and which would be the ‘auxiliary science’.

In spite of the *Methodenstreit* civil war, German economics probably reached its highest point of influence around 1900. Both in the United States and in Japan, economic theory and policy were heavily influenced by German economics. Much to the satisfaction of German economists, John Stuart Mill had recanted on two key features of English classical economics relating to economic development: the wage-funds doctrine (which limited the resources available for wages and salaries) and the free-trade doctrine (Mill admitted the usefulness of industrial tariffs). It was generally agreed that Ricardo’s abstract system had produced social disasters. A symptom of the loss of influence was Cambridge economist W. Cunningham’s (1904) book, *The Rise and Decline of the Free Trade Movement*. It was therefore with a certain justification that Gustav Schmoller, in his inaugural lecture as *Rektor* of the University of Berlin in 1897 (Schmoller 1897), could celebrate the victory of empirically oriented over dogmatic economics, both left and right.

GERMANY 1945–1947: THE MORGENTHAU PLAN VALIDATES THE GERMAN ECONOMICS TRADITION

German economics, with an unbroken tradition from about 1650 to 1950, is uniquely valuable as a full-fledged alternative to today’s mainstream economics. This tradition represents the most consistent bulwark against mechanistic and simplistic economic solutions of all political shades. We have attempted to build on this theoretical tradition in constructing the ‘Other Canon’ of economics (www.othercanon.org). Creating, motivating, directing and controlling market forces in order to enhance human welfare has been the leitmotif of German economic theory since its inception after the Thirty Years War.

³⁸ Professor Jürgen Backhaus, now of Erfurt University, has for almost two decades organized the Heilbronn Symposia, the main purpose of which is to render important German economic analyses accessible in the English language.

³⁹ For a discussion of the *Methodenstreit*, see Reinert (2003a).

After World War II, German-type economics continued to dominate German economic policy in its 'social market economy'.

The economic integration of Europe, at least until the 2004 extension, followed Friedrich List's prescriptions of symmetrical integration. In Europe, German pragmatism ruled at home, recently with a huge emphasis on innovation, while neoclassical economics became an export article ruling Europe's relationship with the rest of the world. As a theoretical tradition the German tradition of economics was essentially thrown out – in our view, totally unjustifiably – with the bath water of Nazism. Policies based on this theoretical tradition developed not only Europe, but also the United States and Japan; indeed, such policies have been a mandatory passage point for all successful national transitions out of poverty.

After World War II, the core idea of cameralism as development economics – the idea that national development needs an increasing returns manufacturing sector – was vindicated through a large-scale experiment, the Morgenthau Plan. The purpose of this plan, named after Henry Morgenthau, the US Secretary of the Treasury during 1934–1945, was to prevent Germany from ever starting a war again (Morgenthau 1945). This was to be achieved by de-industrializing Germany, making it a pastoral economy by closing factories, taking the industrial machinery out of the country, and filling the mines with water. The plan was approved in an Allied meeting in 1943 and carried out after the German capitulation in May 1945.

The Morgenthau Plan was abruptly stopped in 1947 when ex-President Herbert Hoover of the United States, on a fact-finding mission, reported back from Germany: 'There is the illusion that the New Germany left after the annexations can be reduced to a "pastoral state". It cannot be done unless we exterminate or move 25 000 000 out of it.' Hoover had rediscovered the wisdom of the cameralist and mercantilist population theorists: an industrialized nation has a much larger carrying capacity in terms of population than an agricultural state. The de-industrialization process had also led to a sharp fall in agricultural yields and to institutional collapse, providing evidence of the importance of the linkages between the industrial and agricultural sectors that were also a hallmark of cameralist economics. Less than four months after Hoover's alarming report from Germany, the US government announced the Marshall Plan, which aimed to achieve exactly the opposite of the Morgenthau Plan: Germany's industrial capacity was to be brought back to its 1938 level at all cost. It cannot be emphasized enough that the Marshall Plan was not just a financial plan, but principally a re-industrialization plan.

After years of neglect, the Morgenthau Plan was resurrected *de facto* by the Washington Consensus, starting in the 1980s and, even more strongly, after the end of the Cold War in 1991. This new *de facto* Morgenthau Plan came with the label of 'structural adjustment', which often had the effect of de-industrializing Third World nations. These two ideal types of economic policy – the Marshall Plan and the Morgenthau Plan – embodied the 'virtuous' and 'vicious' circles that were fashionable, but not well explained, in the heyday of development economics during the 1950s and 1960s (Reinert 2003b).

In 1947 the United States understood the destructive forces that had been put in motion with the Morgenthau Plan. In his Harvard speech in June 1947 – announcing what came to be called the Marshall Plan – US Secretary of State George Marshall stressed that 'the farmer has always produced the foodstuffs to exchange with the city dweller for the other necessities of life'. This division of labour, that is, between increasing returns activities in

the cities and the countryside, was ‘at the present time . . . threatened with breakdown’. George Marshall then made a remarkable recognition of cameralist and mercantilist economic policy: ‘This division of labor is the basis of modern civilization.’ Civilization requires increasing returns areas, something that people from Giovanni Botero and Antonio Serra through to Abraham Lincoln and Friedrich List had already been saying for a long time. However, this core of five centuries of economic theory has always eluded trade-based English economics and its successor, today’s mainstream economics. Its conceptual and instrumental tools fail to grasp this factor; a key blind spot in mainstream economics that causes untold human suffering today. Herein lies the key to understanding the growing number of ‘failed states’ that now follow in the wake of the Washington Consensus. In 1953 George Marshall was awarded the Nobel Peace Prize.

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4. Friedrich List: the international dynamics of mindpower

*Arno Mong Daastøl**

LIFE: PRACTITIONER, VISIONARY AND PROPAGATOR

Friedrich List (1789–1846) was born into a craftsman's family in Reutlingen, near Stuttgart, in today's Germany. He became a 'Cameralist of the bureaus': educated and serving as a public accountant. Under his mentor, the reformer Minister von Wangenheim, he was appointed Ministerial Under-Secretary (1816), and then Chief Examiner of Accounts. Although lacking required credentials, he was appointed Professor of Statecraft (1817) in Tübingen; where he befriended Johann Friedrich Cotta, who had earlier promoted the poet and historian Friedrich Schiller.

List actively promoted industrialization and therefore a German customs union through his involvement in several journals and by establishing and leading the first German association for trade and business (1819). After he was elected to the parliament of Württemberg in Stuttgart (1819), he was imprisoned (1822) due to his promotion of liberal political reforms. He escaped, visited London and saw the new railways. He stayed in Paris and met the American revolutionary hero General Lafayette. After List's return (1824), he was arrested but released, as he accepted to emigrate to the United States of America (USA). Invited to travel around with Lafayette, he met with and befriended many leading American patriots. He became active as a farmer, a mines and railroads entrepreneur, a publisher and a propagandist for industrialization, urbanization and the North American customs union.

He returned to Germany as a consul for the USA (1832), but soon devoted himself to propaganda for railroads, in particular the publishing of several related journals, as well as hosting meetings, in Germany and other European countries. He used his practical experience from the construction of the Little Schuylkill Railroad (1831) to build the first large German railroad (Dresden-Leipzig, 1837). List's practical background – from public administration, private business and journalism – reveals itself in his writing style: deliberately simple and engaging, hands-on and pragmatic, with an overview regarding what matters.

INSPIRATION: FROM LIBERALIST TO PRAGMATIST

The disunity of Germany and the supremacy of England shaped List's worldview in particular. At first List was impressed by the Liberal trade theories of Adam Smith and Jean-Baptiste Say. Nevertheless, the good practical results in Germany under Napoleon's

* Based on my PhD (Daastøl 2011).

protective Continental System, and the sad effects after its dissolution, changed his mind. Thereafter he promoted a protective German customs union with internal free trade. List's main method thus came to be practical, comparing the factual results of various economic policies. Friedrich List developed his theories in a cultural environment dominated by Idealist¹ philosophy, 'the German Renaissance' (Windelband 1893 [1892], 529–530). This strongly shaped his anti-materialist opposition to, for example, Adam Smith and Thomas Malthus.

In his three years' French exile, List learned to appreciate French economic ideas, especially those of Charles Dupin. In America, he was particularly impressed by the progress under the protective system, enhanced in 1824. This convinced him further of the value of an empirically based and pragmatic strategy, as opposed to absolute and dogmatic Cosmopolitanism: 'When afterwards I visited the United States, I cast all books aside – they would only have tended to mislead me. The best work on political economy which one can read in that modern land is actual life' (List 1841a, xxix). Most of his friends in the USA were spokesmen for the 'American System', as List largely was to be too, although after his return to Europe he preferred the more neutral term of 'the industrial system'.

The English strategy of self-contained development was typical of Mercantilism (Gipson 1954, 25). Likewise, the 'American School' strategy was to protect infant industries with import tariffs and to channel public revenue and private investments towards internal improvements, to increase competitive power for the common good.

List claims that the American System differs from the British system in not seeking to dominate and instead seeking equality of nations. Furthermore, the American System promotes high wages and the Christian idea of cooperation and harmony between capital and labour (Greeley 1870, 24–25). The theoretical difference thus boils down to a state of mind regarding political intentions.

CRITIC OF MATERIALISM

List's criticism against Smith is particularly directed against his materialism² and, as logical results, reductionism,³ methodological individualism, social nominalism,⁴ and a gospel of individualistic greed. Smith regards wealth and its sources as material. This failure to value the inner qualities of Man largely leads him to ignore Man's dynamic ability to learn and to innovate (and how this ability has to be nurtured and protected to flourish): 'Adam Smith regarded the physical labour which produces goods having exchange value as the sole source of goods . . . ignoring the intellectual resources that lie behind the creation of productive powers' (List 1837a, 186). Smith's generalizations

¹ Idealism: reality is constructed on the basis of ideas and meaningful relations and must be explained in such teleological terms.

² Materialism: reality is constructed on the basis of matter and physical relations and must be explained in such mechanical terms.

³ Reductionism: reducing the kinds and factors of causation, a simplified model of reality.

⁴ Nominalism: only individual things are real. Relations between phenomena are only apparent and fluid. Descriptions of relationships are based on external properties based on resemblance, promoting measurability and statistical tendency laws.

on this materialistic basis lead to abstraction, formalization and monetarism, and a myopic exclusion of factors of importance, such as institutions and the need for public regulation.

List argues⁵ that Adam Smith has a tendency of explaining in very general terms. There is no time and there are no nations, and accordingly there is no politics, no power, no difference between manufactured goods and raw materials. There is no difference between branches of production, no difference between nations – such as agricultural and manufacturing nations, no learning, no development, nor any stages of development. Furthermore, there is no difference between public interests and national affairs versus private affairs; merchants' practices apply equally well to national affairs.

Reductionism: Methodological Individualism

List argues that Smith generalizes the notion of material self-interest for the whole economic system: 'Adam Smith . . . does not even assign a productive character to the mental labours of those who maintain laws and order, and cultivate and promote instruction, religion, science, and art . . . His doctrine at once sinks deeper and deeper into materialism, particularism, and individualism' (List 1841a, 137). List, in effect, accuses Smith of being a reductionist, reducing society singularly into one motive, unable to maintain a holistic view of society (see also Windelband 1893 [1892], Ch. 15: Mechanism and Teleology).

Likewise, List criticizes Thomas Malthus for a lack of belief in Man's creative capabilities and thoroughly immoral politics. Malthus also reinforced Smith's arguments against commercial regulations: 'The laws of a competitive society were put under the sanction of the jungle' (Polanyi 1944, 125).

But Aristotle had already pointed out that all levels of existence have specific and different characteristics (Aristotle, 350 BC, Book 1.2). One example of such reductionist errors or 'fallacy of the wrong level' is Smith's opinion that, 'What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom' (Smith 1776, Book IV, Ch. II, 457).

Nominalism: Social Atomism

Smith thus largely ignores human intelligence and morality, which create and reshape social cohesion and collaboration, which again constitute and drive the national confederation of labour (teamwork): 'The cause of the productiveness . . . is not merely that division, but essentially this union' (List 1841a, 150). List thoroughly discussed Smith's social nominalism ('atomism') and, accordingly, his methodological individualism. Smith's nominalism prevents him from recognizing the existence of immaterial factors such as (communal) institutions (Amery 1906, 6). This denies the existence of the nation and downplays the need for regulation. The economic sociology of, for example, motivation and co-operation is a foundation of economic theory, and Schumpeter later

⁵ List's criticism of Smith is primarily of interest here in order to illuminate List's own ideas. Whether he was correct in his description is of secondary interest. Nevertheless, List often admitted to exaggerations.

chastizes the English Classical School's treatment as 'unsurpassed in its baldness, shallowness and its radical lack of understanding' (Schumpeter 1912, 87).

Monetarism, Exchange Values, Mercantile System

Smith's materialism (and nominalism) lays the foundation for abstraction and measurement as prime methods in economics: 'Since his doctrine is entirely materialistic in conception he is concerned only with the "exchange value" of material goods – he tries to justify his view by defining the activities of these producers in purely materialistic terms' (List 1837a, 37).

This 'Ricardian Vice' led to formalization and monetarism (the theory of exchange values), with money as the sole numerator of economic activity: 'The exchange theory of Smith and J.B. Say regards wealth from the narrow point of view of an individual merchant, and this system . . . is itself nothing else than a restricted mercantile system' (List 1841a, 354). Ricardo refines what was inherent in Smith's theory, and Schumpeter describes Ricardo's method of abstraction as a 'reduction' of economics towards a pure analysis of values in exchange (Schumpeter 1912, 80). Mark Blaug somewhat sarcastically remarks that Ricardo makes Smith look like an empirically inclined person (Blaug 1980, 58).

Austerity versus Intellect

Smith argues that the source of wealth is specialization (division of labour), which depends on the size of the market and on the amount of capital available. The necessary measures are therefore free trade and saving (to increase capital accumulation, the ratio of capital to labour) (Smith 1776, Book II, Ch. III). List retorts that:

He reduces the process of the formation of capital in the nation to the operation of a private rentier . . . this theory of savings . . . if followed by a whole nation must lead to poverty . . . the mental power required for production vanishes . . . Where everyone saves and economises as much as he possibly can, no motive can exist for production. (List 1841a, 227–228)

It is not true that the productive power of a nation is restricted by its capital of matter . . . Greater part of the productive power consists in the intellectual and social conditions of the individuals, which I call capital of mind. (List 1827b, Letter 4, §2)

As an alternative to Smith's 'mercantile' austerity policy, List argues that national institutions must issue public credit – backed by national productive power – for productive purposes.

PRODUCTIVE FORCES

List desires a radically different science of how wealth is produced by improving intellectual and social conditions:

The building up of the material national capital takes place in quite another manner than by mere saving as in the case of the rentier, namely, in the same manner as the building up of the productive powers. (List 1841a, 227–228)

There are consequently one Cosmopolitical and one Political Economy, one theory of value in exchange and one theory of productive forces, doctrines which, very different from each other, must be developed independently. (List 1841a, *Introduction*, 29 in the German edn, my translation)

Growth: Solow's Residual

Adam Smith argued that growth resulted from specialization, due to market expansion and saving. But studies in the 1950s and 1960s indicated that almost 90 per cent of growth per capita resulted from other factors. This 'residual' was denominated as 'technical progress' (Solow 1957, 320). Standard economic textbooks are still laggards in this area (Mankiw 2002, 189; Mankiw 2006, 407). Nevertheless, a consensus has gradually emerged, recognizing that progress in technology, human capital and institutions is responsible for most of the growth.

Mental Capital: Source of Improvements

List understood this, and more profoundly so (Amery 1906, 14, 19, 26). Since human, technical and institutional progress largely are all due to increased morality and knowledge, growth is therefore mostly due to growth in immaterial capital rather than in physical capital; or, to use List's phrase, growth is mainly due to growth in 'mental capital'. 'List is in no place more original or successful than in the exposition of his theory of productive forces and immaterial capital' (Haney 1924 [1911], 378).

List's concept of mental capital is broader and deeper than in the more individualistic human capital tradition, since List includes collective and historical factors, materialized in communication and collaboration, in informal and formal behaviour, such as habits and institutions, all comprising the 'Confederation of Labour'. List thus explains wealth as a result of culture, moral and intellectual: 'industry and knowledge are the causes of individual wealth and public prosperity' (List 1827c); 'Mental work is in the social economy what the soul is to the body' (List 1927–1936, Vol. 5; 1930, 42).

Freedom and Will to Progress

There is a deep moral commitment to progress, spiritual and material, in List's writings: 'perfecting of national spirit . . . must be, a chief object of national endeavour' (List 1841b, 302). The will and determination to progress is paramount: 'all that is required of the Governments . . . is – ENERGY' (List 1841a, 435), 'above all things we must have enough national spirit' (*ibid.*, 193).

As a Christian, he considered individual spiritual freedom to be both the ultimate good (choose the good), and at the same time the great mover of economic progress (innovation and cooperation). List also claimed that Christianity is better suited for development than Islam, and some versions more than others (for example, Protestantism promoted literacy and unorthodox thinking).

Education and Science: Quality Labour

List emphasized education as the bedrock for a progressive industrial society. Historically, the huge sacrifices of countries in ‘exchange value’ to improve knowledge ‘have ultimately been rewarded by an immense increase in their prosperity and productive power’ (List 1837a, 35). Workers in an advanced country have much greater output if they are well educated and well provided for, as in England. List advises studies (especially of mathematics and science) and travel as well as free and direct communication, especially with those of other trades. He praises the French system of education and higher technical schools.

Urbanization: Concentration Detonates Ideas and Freedom

List notices how quickly information travels in towns and how easily their populations get organized. The most vital result of urbanization is an elevation of civilization, including individual freedom, economic and cultural diversification, rule of law and democracy; and this increases with the development of industry: ‘liberty and civilisation have everywhere and at all times emanated from towns’ (List 1841a, 203), ‘Serfdom, feudal burdens, laws and regulations which injure industry and liberty disappear’ (ibid., 208).

Urbanization leads to differentiation in production and consumption which, in a virtuous circle, releases more creativity. List’s explanation is sociological: ‘Friction produces sparks of the mind . . . Mental friction . . . only exists where people live together closely’ (List 1841a, 203–204). Urban population density also allows for economics of scale and thus for industry. Geographical overreach is inefficient sprawl.

Industry: Organizer and Liberator

Industrialization promotes urbanization, since it concentrates the productive factors: ‘This process of concentration eventually creates an expansion of productive powers’ (List 1837a, 69). Industry also promotes urbanization through better machines, energy and communications, as illustrated by England.

As with towns and communications, there are important cultural effects of industry, since it demands self-disciplined and skilled labour and therefore elevates freedom and culture in general:

The more industry and agriculture flourish, the less can the human mind be held in chains, and the more are we compelled to give way to the spirit of toleration . . . all the mental powers of a nation, its State revenues, its material and mental means of defence, and its security for national independence, are increased in equal proportion by establishing in it a manufacturing power. (List 1841a, 209)

Only an industrial nation is able to release the huge and varied potential of different individuals, also those with less physical strength: ‘mental gifts are infinitely more prized’ (List 1841a, 200); ‘It has been the experience of all ages and of all countries that freedom and industrial progress are like siamese twins’ (List 1837a, 153).

An industrial nation gains ‘immeasurably’ more from inventions, scientific progress and machinery than an agricultural nation. Only an industrial nation is able to liberate

the huge potentials of agriculture and natural resources. Science and industry produce machinery, which tenfold outweighs the use of slavery. Industry is therefore the centre of a new type of economic system that increases the pace of production tremendously, later termed the 'National Innovations System' (Freeman 2004 [1982], 16): through cross-cutting symbiotic loops, perfecting the industrial system, cooperation, innovation and labour efficiency is increased.

Communications: Artificial Concentration

Bringing all branches into efficient contact with each other presupposes efficient communications, and this is how England excelled early on. On a national scale, more efficient transport reduces the effective distance, creates larger markets and thereby greater competition, which equalizes prices geographically: 'The agricultural-manufacturing-commercial State is like a city which spreads over a whole kingdom' (List 1841a, 339).

This enlargement of markets may be seen as 'virtual urbanization', allowing a nation to imitate the population density and benefits of cities. Better communications between citizens means less possibility for political control of the individual and therefore greater political freedom. The primary role of transport is thus immaterial: spreading information and culture, thereby contributing to intercultural understanding and peace, thus elevating civilization (List 1837b, 1838). List therefore had an especially sharp eye for innovations within communications, for example 'electro-magnetic force' and the telegraph.

The Confederation of Labour: Balanced Development

Smith's principle of cooperation of individuals in a factory, the division of labour, is complemented and replicated on a national scale with the principle of cooperation of labour between all branches: 'We call this relation the balance or the harmony of the productive powers' (List 1841a, 159). List argues that tariff policy and infrastructure mutually support each other in improving integration and the national 'Confederation of Labour': 'The railway system and the customs union are Siamese twins' (List 1841c).

Although international division of labour is good, proximity and local production is better, due to benefits from stability and local synergies in production and consumption. List claims that Smith neglects the fact that cooperation is most successful where whole districts are devoted to their specialities, thus preceding modern cluster theories (Porter 1990).

The more populated, urbanized and interlaced a nation is, the greater is its occupational variety, and the more productive the nation is. In the national organism, each part benefits from the variety and perfection of other parts (and therefore has an interest in their perfection), as illustrated by England. Thus, development should be balanced between all sectors.

REGULATION AND POLITICS

Private and Public Interests

List praises entrepreneurs for their initiatives and argues that merchants necessarily must run a profit. Nevertheless, List criticizes politicians who let short-term mercantile interests dictate those of the nation and criticizes Smith for a lack of differentiation between private interests and public interests (Smith 1776, Book IV, Ch. II, 30, 457, 464), and his opposition to government interference (Smith 1776, Book IV, Ch. iii, Part ii). List argues that, ‘Without interference of national power there is no security . . . Industry entirely left to itself, would soon fall to ruin, and a nation letting everything alone would commit suicide’ (List 1827b, Letter 6; see List 1841a, 166). The national interest therefore requires an active state.

Institutional Tools: Just Representation

In opposition to Marxism and Liberalism, the Romantic, Conservative and Anarchist approaches argue that civil society’s intermediate institutions secure freedom and opportunities for individuals (Nisbet 1986, 48–49). The nation, standing between the individual and the world stage, holds a necessary intermediate role. As an example, national tariffs improve individual freedom and opportunities by protecting investments in skill and production, ‘it does something which the individuals . . . would not be able to do for themselves’ (List 1841a, 167).

Sound legislation and administration ‘is the quintessence of a system of Political Economy’ (List 1841a, 333) and ‘nations in the enjoyment of a good constitutional government succeed better than others in industry, commerce and navigation’ (List 1841a, 295). To promote sound administration, what matters most is stability, just representation, individual liberty and security of property. List argues for agricultural reform promoting efficiency and industrialization, and political reforms for better representation. List is pragmatic and argues – as does, for example, Hegel – that since a nation’s foundation lies in its mental powers, government must correspond to the maturity of the people. List’s attitude to municipal autonomy demonstrates democratic ideals tempered with realism (Hirst 1909, 7; Chaloupek 2012).

Law and Administration

Markets do not always function optimally, as with transaction costs and public goods. Markets may thus need a benevolent ‘guiding hand’ in addition to the ‘hidden hand’. Like the Cameralists, List defined the economic profession as a duty to direct and regulate in search of perfection, and he argues, against J.B. Say, that law and institutions do matter for wealth creation: ‘Although laws and public institutions do not produce immediate values, they nevertheless produce productive powers’ (List 1841a, 144). To promote industry, List suggested using several Mercantilist tools: temporary monopolies – like patents; differentiated credit, tariff protection and subsidies; grants, prizes and exhibitions; and financing start-ups by state purchases of stocks. The dominant role of immaterial factors crucially involves incentives. The incentive structure is crucial for the

promotion of the mental powers of production, for example innovation and entrepreneurship. This concerns tax incentives, but also non-pecuniary measures such as prizes of excellence.

The luxury of 'unnecessary' colonial products incites the masses to labour, and by allowing social climbing, flexible class systems stimulate excellence. Nevertheless, injustice is a major reason for existing economic problems, for example slavery. Positive incitements rank highest and prohibitions rank lowest, since freedom is a key motivator in modern society.

Over direct and administrative tools, List favours indirect measures through the legal apparatus, for example through taxation, since this restricts the randomness and excesses of the bureaucracy, creating a more stable and predictable framework for business. Although taxation arrangements have far higher significance than any other intervention into industrial matters, the best strategy for the promotion of some key industries is improvement of internal communications.

PRAGMATIC PROTECTION AND NURTURE

Calling List a protectionist is a misnomer. Rather, he was a realist and a pragmatist, advising both free trade and protectionism as tools, relative to circumstances: pragmatic policy recommendations adjust to reality.

Stability as Premise

The fragile core of the productive powers is mental capital. Disruptions of production have dire consequences for the maintenance and competitiveness of material equipment such as buildings and machinery, and the effect on mental capital is far more severe. Achieving a high level of production and civilization requires the steady efforts of many generations, but all may be ruined in months. A lack of industry leads to indebtedness, destabilization and social crisis. Promoting stability is therefore the primary role of tariffs, regulating consumption to protect production and investments.

Debt and dependence: balance of trade and industry

The repeated American economic crises were caused by the lack of productive power, accompanied by trade deficits and debt to England: the American inability to pay her debts led to a lack of trust in her currency, bank failures, a general crisis in the economy, deterioration of industrial skills and enduring social crisis. British loans merely delayed and increased the crises, allowing English interests to procure American assets on the cheap. List also points to similar experiences in Russia. Therefore, disadvantageous fluctuations, in, for example, the money market and the banking system can only be avoided if a balance of trade is restored.

Attacking such Mercantilist arguments, Adam Smith claims that international imbalances in trade and payments would be self-adjusting, and governmental intervention in trade damaging (Smith 1776, Book IV, Ch. iii, Part ii). List, however, argues that this was empirically wrong, since governments of some nations, such as England itself, actually did break the rules and did interfere. It would therefore be suicidal for others to leave

themselves unprotected: ‘a careful tariff is much wanted to pay our national debt’ (US President Andrew Jackson 1824). List accuses the Cosmopolitan School of conscious neglect of the dangers of trade and payment deficits and indebtedness; creating dependence on England was their real goal.

Protection of consumption and investments

Thus the USA needed to stabilize and protect home markets from foreign actions. This would create demand at home (Clay 1832, 109), which would nurture and stimulate feeble but promising industries. And, since domestic and commercial short-sightedness also may provoke disruptions, commerce should be regulated in the interests of production.

When stability of an industry is secured, investment in capital, skill and education is promoted, especially in those skills and branches that demand an extra effort. Alexander Hamilton claims that due to protection in America, European capitalists will be attracted (Hamilton 1791, Ch. VII), and List agrees: ‘Protective duties act as stimulants . . . They guarantee a reward’ (List 1841a, 307). The USA had to elevate the quality of labour and industrialize.

Restructure Business: Learning as Investment

Restructuring business by promoting skills and incentives for investment is the second role of tariffs.

Catching up: barriers to newcomers

Catching up with leading industrial nations is a complicated, demanding and time-consuming task. List compares the situation with a boxing match between a strong man and a child. A newcomer in a less developed country will be discriminated against in practice (see also Hamilton 1791, 93). A less developed country will always have a hard time establishing industry in branches where advanced countries are already established, lacking many of their advantages; and the more knowledge-intensive the industry, the higher such barriers to entry: know-how, regulatory experience, skilled pools of labour, cheap credit and advanced communications.

Levelling the playing field: moderate protection

A less developed country that wants to develop its own industry has no option but to level the playing field for infant industries, to give them a fair opportunity: ‘those who belong to us are merely thereby put on the same footing with them’ (List 1841a, 169). Protective duties are a softer version of patents, giving absolute but temporary monopoly and protection to intellectual investments.

List’s pragmatic stage theory (unduly criticized for rigidity) advises no tariffs at an early stage of development, when there are no skills to protect. As skills start to develop, these must be protected in a sheltered home market. When finally a branch is competitive internationally, tariffs should be removed: ‘history teaches us how nations . . . modify their systems according to the measure of their own progress’ (List 1841a, 115).

Key branches: special promotion

Tariffs must be used to favour branches that: (1) demand large investments in physical capital, technical knowledge and management; (2) employ many workers (when labour is abundant); (3) are key to the establishment of other industries; and (4) are strategically important for the survival of the nation. Development should strive for balance, but some branches are pivotal to other branches, such as energy, transport, machine tools and credit. It is a state's duty to promote these in particular.

National monopolies: improving global efficiency

Tariffs must be used with care and discipline. Therefore, tariffs should be temporary and moderate to prevent laziness among producers: 'Every exaggeration of protection is detrimental' (List 1841a, 324). Bad national monopolies raise domestic prices permanently, whereas good national monopolies lower them in the longer term, for example by counteracting a foreign monopoly. Temporary domestic inefficiencies due to tariffs can be combatted by encouraging domestic competition, for example by improving communications. Smaller nations should unite with other nations to create markets large enough to allow both efficient production and domestic competition.

Investments will pay off in the long run

Smith argues that a country should 'stick to its last' and produce what it already has a 'natural advantage' in producing, no matter whether these natural advantages are a gift from nature or a learnt advantage (Smith 1776, Book IV, Ch. II, 458). Governments should not interfere, should not try to change the economic structure of a nation, nor the existing international division of labour.

List agrees that the theory of natural advantages to some degree is correct regarding agriculture, but not regarding manufacturing, which can be learned (according to Smith, as well). List refers to the collective learning process as 'the industrial education of the nation' (List 1841b, 315). Infant industry tariffs are thus often referred to as education tariffs. List argues that temporary extra costs of government interference are investments in productive powers which actually will pay off in the long run. This question cannot be solved theoretically, only empirically.

Fiscal Income: Least Important

Giving a fiscal income is the third and least important role of tariffs. Nevertheless, fiscal income is important in order to secure funds for public activities. When revenue is used productively, such as investments in public infrastructure, revenue is further increased.

SOVEREIGNTY AND INTERNATIONAL POWER

Power in International Trade: Realism

List is a realist concerning international power: the factual setting for a science of political economy is an international economic system of competing nations. Thus, foreign trade must be considered not myopically from a short-term monetary point of view, but

rather from a national productive point of view regarding long-term survival. National policy, and the resulting power, decides how trade imbalances will be sorted out; leading to indebtedness and servitude or to prosperity and sovereignty.

While philosophical Cosmopolitan dreams of the future demand multilateralism (a universal union of free trade), the political realities of the present demand unilateralism (special regulations), and without the latter, national survival is not possible. It would be unwise to act as if such a Cosmopolitan union of nations existed before it actually did, but this is what the Popular School requires. Premature free trade would ruin unprepared nations and give the predominant nation universal monopoly, power and riches: 'Such "freedom" leaves us to the tender mercies of foreigners' (List 1837a, 25).

Less developed nations must defend themselves, in theory and in practice. They must first understand how England tricks them; List called for the development of an alternative theory, which would expose Smith's erroneous Cosmopolitan theory and contrast it with English Mercantilist practice.

English Practice: Mercantilism

During her period of national construction, and after, England followed strong protective and interventionist policies to achieve industrial and naval supremacy (Williams 1899 [1888], Ch. 2), announced by the King and in Parliament, involving 'the exportation of manufactured goods and the importation of foreign raw material' (List 1841a, 40).

Whereas England accomplished many praiseworthy things, such as in science, technology and the arts, she also undermined the efforts of other nations to develop into civilized and prosperous states, for example by restricting imports (also Clay 1832, 109). England also used price-dumping against competitors, and the Bank of England employed financial manipulations of credit. She 'kicks away the ladder' which she herself had climbed (List 1841a, 368).

English Theory: Cosmopolitanism

England discouraged others from following her example, by ridiculing the balance-of-trade issue (Smith 1776, Book IV, Ch. iii, Part ii) and by promoting the Cosmopolitan 'theory of exchange values': 'buy cheap' instead of increasing the powers of production (Smith 1776, Book IV, Ch. ii, 30). England also used William Pitt's theory of 'comparative advantages' to negotiate trade treaties that would undermine the aspirations of competitors abroad. After Smith, the Cosmopolitan theory was used 'to conceal the true policy of England . . . in order to induce foreign nations not to imitate that policy' (List 1841a, 368). On several crucial issues even Smith was a protectionist, and 'his system, considered as a whole, is so confused and distracted, as if the principal aim of his books were not to enlighten nations, but to confuse them for the benefit of his own country' (List 1927–1936, Vol. 2, 1930, 160).

Self-sufficiency: Strategic Transport – Water

A nation must be self-sufficient in order to be free and thus prosperous, also in times of war and crises: it must have access to raw materials and markets for its manufactured

goods. Since few nations are self-sufficient, however, they must trade abroad. List's 'strategic geography' therefore focused on transport, which in his time largely meant water-based transport. The nation that does not have and control its rivers and coast depends on other nations. It suffers from limited sovereignty. To access markets and luxury products in the tropical colonies, a sovereign nation or union resembles England: she needs a merchant fleet, and an 'adequate navy' to protect commerce abroad, until 'free trade, free ships' becomes a reality.

An alternative to foreign trade is to increase domestic trade by territorial expansion, as with the British Empire; or partly so, as with Napoleon's Continental System. Wars are destructive, however, and thus the time has come for free negotiations and agreements and peaceful unification.

Germany's Situation: Railroads

For German safety, it was necessary to gain control over her rivers, coast and harbours. Therefore Denmark, the Netherlands and Belgium ought to join the German *Zollverein*. This expanded *Zollverein* would build a merchant fleet and an 'adequate navy'. These smaller nations would gain in security and by getting access to the large German market, but alone they would be pawns in the hands of larger nations.

Extensive railroad networks would change Germany's situation dramatically from the battlefield of Europe to a fortress. In modern geopolitical terms, railroads change the balance of power between the land and sea powers: railroads could accomplish on land what a merchant fleet could accomplish on the oceans. A railroad from Berlin to Bombay should be constructed to access colonial products. This would escape the control of the English navy (Quigley 1966, 120–124). For economic reasons, List suggested emigration to areas South-East of Austria-Hungary. To avoid conflicts, List invited England to see the mutual interests in an alliance with Germany (List 1846). Lord Palmerston and Sir Robert Peel turned this down.

A European Union – and Beyond

First, the German home market should be secured by establishing a domestic commercial union. Germany would thence pay for tropical products with manufactured goods. But this was still insufficient to achieve sovereignty: 'As yet, the apportionment of territory to the European nations does not correspond to the nature of things . . . A just and wise apportionment of territory is, however, at this day not to be thought of' (List 1841a, 410).

Thus, to avoid internal wars, the European continent must unite. Germany is the natural centre of a united Europe, but Germany is hindered by her own sluggishness. Furthermore, Continental nations have a common interest in defence against England's 'whims' and must unite, but on a voluntary and egalitarian basis. It would be in the interest of England to join the union – to defend herself against the upcoming supremacy and egotism of the United States, 'she should accustom herself betimes to the idea of being only the first among equals' (List 1841a, 424). 'An attempt to set up a new Continental System, however, would endanger the prosperity not only of England but of all nations and . . . the only satisfactory solution to the problem would be the establishment of world free trade' (List 1837a, 52).

Benevolent Imperialism: Ending Selfish Colonialism

History may have proven List wrong on his 'climatic' reasoning regarding tropical countries: they were not cut out to become advanced nations, but for ever remain agricultural subject states. But List modifies this somewhat, claiming that an infusion of European people, vitality and civilization will put the decayed house in order. Furthermore, trade with more advanced nations is the most effective way of elevating less developed nations, and foreign investment and skill from abundant countries will develop less developed countries.

Advanced nations, especially England, would gain from opening up their monopoly trade with their colonies to other nations. Furthermore, global free trade, first in raw materials, would make the selfish colonial system as well as navies obsolete: 'A liberal policy of this kind would strike at the very root of the evil of economic selfishness' (List 1837a, 50).

Only one reason for having colonies would then remain: 'It is the task of politics to civilise the barbarous nationalities' (List 1827a, 175). This would have the mutual benefit of aiding the less developed nations as well as expanding the world market for the advanced nations, constituting what we might call 'benevolent imperialism', as indeed many colonial powers professed.

From Neo-Mercantilism to a Harmony of Interests

List argues that 'able' but less developed nations have a duty to protect their citizens and develop their productive powers. But since a unilateral neo-mercantilist strategy is destructive to all, an alternative must be developed: a gradual and legally oriented road to mutual trust and universal and true free trade, a multilateral policy of 'harmony of interests', as opposed to phoney 'free' trade under English or American domination.

Negotiated treaties must be balanced, as well as respect that all nations must first be allowed to protect infant industries. By allowing all nations to develop, this would make them fit for real competition and collaboration: 'The system of protection . . . appears to be the most efficient means of furthering the final union of nations, and hence also of promoting true freedom of trade' (List 1841a, 126). Nevertheless, trade and trade treaties are most beneficial when nations are equally well developed, simply because competition is then most just, balanced and efficient. The European continent is therefore the place to start.

The creation of fair treaties must lead to international rule of law and political unification of all nations under one law. Efforts should be made towards gradual unification, nationally, continentally and globally. This would gradually be institutionalized in treaties and organizations. A world trade congress should be called to discuss common rules and to promote the introduction of a world customs union.

LEGACY: THEORY AND PRACTICE

Theory: Idealist and Pragmatic Realism

Friedrich List has been derogatorily characterized as a ‘ghost of protectionism’, a splendid popularizer, but not very profound. Regarding abstract and pure theory, ‘List made no original contribution to the analytical apparatus of economics. [But he had] a grand vision of a national situation [and] . . . his analytical apparatus was in fact ideally accurate for the purpose’ (Schumpeter 1954, 504, 517).

And indeed, the depth of List’s combination of anti-materialism and realist pragmatism, may be underestimated, ‘List holds historically one of the highest places in economic thought as applied to practical objects’ (*Encyclopaedia Britannica* 1911). Many of List’s practical ideas were noticed and bore fruit, especially concerning railroads, infant industry protection, and stages of development, but also regarding economic unification and geopolitics.

List’s call for an alternative theory of economics was dealt with by the later German Historical School. It had huge practical impact during the last part of the nineteenth century and beyond, and vigorously inspired economists abroad: ‘the most important economic work that has been done on the Continent in recent times is that of Germany . . . German economists often lay stress on the non-material elements of nations’ wealth’ (Marshall 1920 [1890], 49, 767). List’s call for an alternative theory was also followed up in his own time by the American System economists (e.g. Clay 1832), and later with the American Institutional economists, largely educated in Germany (Hudson 2010 [1975], 89; Tribe 2002).

Specific areas of influence

Through the association *Verein für Socialpolitik*, the German Historical School laid the basis for the world’s first social-reform legislation under Chancellor Otto von Bismarck in the 1880s, by promoting an empirically based social science, ‘directed by ethics to serve tangible human needs’ (Grimmer-Solem 2003, 135).

List strongly emphasized the cultural aspect of transport (communication), and was a forerunner on human capital according to Fritz Machlup, founder of ‘knowledge economics’ and ‘information economics’ (Machlup 1962, 5). ‘List should be considered one of the founders of human capital theory’ (Levi-Faur 1997, 159). Due to his focus both on ‘mental capital’, transport and government intervention, List is increasingly regarded as a founder of innovation theory, industrial policy and thus development theory (Freeman 2004 [1982], Ch. 6, 16; Lundvall 2007). ‘The accredited founder of the developmental theory is Friedrich List’ (Grunzel 1916, 142), ‘a prophet of the ambitions of all underdeveloped nations’ (Laue 1963, 57):

There can be no doubt: in today’s categories of understanding Friedrich List (1789–1846) was a development theorist, a development politician and above all a development planner . . . The starting point of List’s considerations is the problem of ‘catching-up development.’ . . . In his main work, Friedrich List has described this phenomenon of ‘peripherilisation pressure’ and the resulting social decline in detail. (Senghaas 1999, my translation)

The American School and List would have been a better development strategy for China than Marx:

By the time Marx and Engels entered into the discussion, the advocates of an interventionist, protectionist state had clearly articulated a program that . . . identified them as developmentalists . . . they were to exercise influence in less-developed and developing nations throughout the end of the nineteenth and into the twentieth century. Friedrich List was to become one of the most prominent among them. (Gregor 1995, 21–22)

Following Hamilton and List, Sergei Witte argued that foreign capital was necessary to develop Russia (Witte 1921, 74; Witte 1990, 321). Similarly, Sun Yat-sen laid out in detail how to use international capital to develop China (Sun 1922), and Deng Xiaoping argued in the same ‘Listian’ way (Gregor 2005).

Although far from the first writer on trade and tariffs, List is still considered a major figure (Bairoch 1983, 17). A friend of Adam Smith writes, ‘most of the ideas which underlie modern tariffs . . . were originated and formulated by List’ (Hirst 1909, xx). List’s criticism of the free trade theorems has gathered broad interest: ‘The brilliant genius and national enthusiasm of List . . . showed that the Ricardians had taken but little account of the indirect effects of Free Trade . . . and . . . these evils outweighed its direct benefits’ (Marshall 1920 [1890], 767; and commented in Robinson 1962, 64–65).

List was also a forerunner in the economics and strategy of geography and transport:

Friedrich List was the first among economists to clearly recognize the economic and political significance of the land territory of a nation. (Ratzel 1903 [1897], 190)

Friedrich List, the legendary godfather of all railroad planners (Mitchell 2000, 38)

his elaborate discussion of the influence of railways upon the shifting balance of military power . . . shows truly remarkable prescience. (Earle 1943, 148–151)

List is known as a major originator of Realism in political science (Earle 1943, 148–151). Several of his ideas were carried further by founders of modern geopolitics, such as Friedrich Ratzel and Halford Mackinder: for example, concerning sovereignty and power balance, mental and productive power, strategic space and transport, and heartland (Mackinder 1962 [1904], 260–264; Rokke 1962, xv).

Practice: Reactive Developmental Nationalism

German unification

The impact of German unification makes the fears of List’s foreign adversaries understandable:

The unification of Germany in the decade before 1871 ended a balance of power in Europe which had existed for 250 or even 300 years. (Quigley 1966, 211)

Bismarck was a towering figure who put his stamp on his age . . . the map of Europe had been changed beyond measure. The European centre, characterized by a weak conglomeration of small and medium-sized states for centuries, was now home to the foremost military and industrial power on the Continent. (*Encyclopaedia Britannica* 2008)

List wrote the first proposal for a national customs union (*Zollverein*) (List 1819), and the first written plan for a national railway network (List 1833). Among the many promoters of these schemes, List excelled as a good organizer and propagator.

The customs union established unified taxation and then currencies, a parliament with common inspectors and one large market with free trade, and it opened up the borders for a national railroad system, which first energized heavy industries, mining and banking: 'Friedrich List deserves the title father of the German railroads' (Dill 1970, 157). List's efforts to unite the German states made an impact, not least through the respect his plans enjoyed with practical men like Bismarck (Laue 1963, 62) and his collaborators:

His conception of the Zollverein and a modern transport system made him the great forerunner of Bismarck as founder of the German Empire. (Bruck 1938, 38)

He undoubtedly stimulated the work of Bismarck . . . List's rôle was an important one in that he was to a great extent responsible for setting the chain-reaction into motion which led to the formation of the *Zollverein* . . . When Bismarck switched to a protective tariff policy in 1877, List's time had finally arrived. (Snyder 1952, 98)

Jules Domergue meticulously describes how Bismarck followed List's plan:

Bismarck followed step by step the guide of Frédéric List, and he did not hide this. The National System of Political Economy is the favourite book of the Chancellor's reading. (Domergue 1884, 3, my translation, referred to in Wendler 1989, 112–113)

List has many followers to this day . . . and his influence is strong among German officials. (Haney 1924 [1911], 380)

A British First Sea Lord, leading politician and strategist in World War I and World War II, joins the homage: 'The inhabitants . . . are the children of Bismarck's statesmanship, the grandchildren of List's far-seeing genius' (Amery 1906, 35).

USA

The foundation of the American economy was built under the American System, defended by the first row of American presidents (Greeley 1870, Ch. VII). Tariffs and protection were hotly debated in the US after the Treaty of Ghent (1814), 'But no such pre-existing theoretical defense of protectionism was available' (Hudson 2010 [1975], 84).

However, 'Professor List' was held in such high esteem (O'Connor 1944, 33) that leading circles asked him to write the first text book for an 'American System of Political Economy' (List 1827a): 'he may justly be regarded as one of the fathers of the protective tariff policy in the United States' (Snyder 1952, 98), 'In the United States the platform of the Republican party for a long time was based upon his doctrines' (Haney 1924 [1911], 380).

The industrial success stories in the USA and then Germany led to successful imitations in Europe (Wendler 1989, 1996) and elsewhere, especially in (chronologically) Sweden, Japan, Russia, South Korea, Taiwan and China (Austin 2001). Several key planners of the European Union (EU) were highly influenced by List and the *Zollverein*, which became a model for the European unification process (Calleo 1992).

Reactive developmental nationalism: the British Empire

List's 'industrial system' is part of a greater 'anti-imperialist' legacy, a 'reactive developmental nationalism' (Matossian 1966 [1962]); when more advanced nations are perceived

as a threat, this triggers action to catch up with them: 'Japanese capitalism is nothing but a prompt response to the impact of the West' (Nakamura 1968, 48). These strategies tend to use the same tools by force of economic necessity, as List also argued. Therefore, they are also favoured by former leading nations that enter decline. The book *Made in Germany* was a dire warning against the explosive effects of Bismarck's policies, resembling later warnings about Asian progress: 'The Industrial Supremacy of Great Britain has been long an axiomatic commonplace; and it is fast turning into a myth' (Williams 1896, 1). German policies worked as a model for a fading British Empire, to reinstall a protective 'Imperial Zollverein' (Williams 1899, 133, 260; Howe 1997, 215).

Asia

Friedrich List's influence in Asia first took off with the establishment of the Meiji Restoration ('Enlightened Rule') in Japan in 1867: 'The international economic policy of Meiji Japan was a combination of Hideyoshi's mercantilism and Friedrich List's *Nationale System der politischen Ökonomie*' (Linebarger et al. 1956 [1954], 326).

The Japanese conquests of Manchuria, Taiwan and Korea spread List's ideas further (Austin 2001). List's suggestion to start industrialization with land reforms (List 1842) was used successfully in East Asia (Studwell 2013). As in Germany, rulers in Russia and East Asia saw List's strategy as an alternative road to modernization that could counter the materialism of Western Liberalism and Socialism. Often, his ideas were taken over in parts rather than wholesale and adjusted to local paternalism: in Russia and East Asia, his ideas on the necessity of property rights and individual freedom were not adopted as promptly, however central List found them to be for development.

Post-World War II

In the post-World War II period, knowledge of List gradually faded. Until the fall of Communism, few English-speaking academic economists recognized any influence of Friedrich List. And the national elites in East Asia saw no reason to announce their affinity to List, to maintain a supportive relationship with the free trade-inclined and dominant USA.

However, with the fading competitive strength of the EU and US economies towards the turn of the twenty-first century, references to List became more numerous: 'List's ideas are of great importance today. The global trade imbalances and wealth transfers that concerned List are most prevalent today' (Dialynas 2004). Similarly the financial crisis of 2007–2008 has invigorated a search for alternative economic models that combine progress with stability.

IMPLICATIONS

List's first advice is to promote industry, regardless of a country's economic development stage. This will elevate civilization, help remedy debt and instability problems, and promote freedom and prosperity.

Secondly, List's fundamental argument is the predominance of human immaterial factors. Therefore, successful development comes from within; the core factors for success concern heart, wits and will: morality, knowledge and self-discipline. Only this will mould

other crucial factors like responsibility, self-respect and optimism. These factors usually escape traditional formal treatment in economics.

Thirdly, gifts can be counterproductive and result in passivation and dependency, loss of self-respect and ultimately poverty. Fourthly, with attention duly given the points above, constructive gifts are nevertheless the following: knowledge transmission, opportunities to protect and trade, fair access to foreign credit, foreign investment in infrastructure and production.

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5. *Kathedersozialismus* and the German Historical School

Wolfgang Drechsler

An excessive amount of economic injustice, accumulated over several decades, tears down all pillars of the existing order. There are no other causes of great social movements. They never originate in the crazy schemes of single people; they are mere symptoms of social ailment, not its cause.
(Schmoller 1904a, 111)

WHY IS THIS INTERESTING?

The by now highly alternative, barely even heterodox economics that dominated Germany, and in fact continental Europe and much of the world, between the late middle of the nineteenth century and the early twentieth and that is at the basis both of the social market economy and of much of the modern welfare state, is interesting for alternative theories of economic development. Here, the clear recognition of fundamental and pressing social issues – what was called the ‘Social Question’ – gave rise to the realization of economists and many other intellectuals that both the analysis of the problem and the suggestion for remedies depend on method, and that method is never neutral. It shapes how we see reality; it determines the policy outcome – or at least it is used by those who want certain outcomes. And some methods, then as now (they are actually by and large the same), preserve the status quo by calling any investigation of what exists, what is wrong, and what should change, unscientific, futile and impossible. By doing so, they do not necessarily make a counter-claim to reform and development; it is enough if they create a system within which dealing with the real problems is delegitimized.

The late nineteenth-century political attitude towards the Social Question, *Kathedersozialismus*,¹ by and large led the economists involved to focus on realism (rather than abstraction), on relevance over precision, which by then had become a choice. In addition, as Rainer Kattel has suggested, there are also strong parallels between what the Social Question was then and what lack of development is now; one of the key socio-economic problems of the world today, yet one that must be addressed in a relevant and realistic way, of which mainstream theories are, by and large, incapable (which for some stakeholders, without reverting to conspiracy theory, is clearly an advantage).

¹ *Kathedersozialismus* means ‘Socialism of the Lectern’; it is an originally pejorative term that was intended to delegitimize the movement both by calling it socialist and by pointing to the fact that its protagonists were mostly university professors (and thus, presumably, mere armchair intellectuals). Coined by the journalist H.B. (Bernhard) Oppenheim (Boese 1939, 25; Lexis 1908, 27–28; see Brentano 1931, 76, 96), the term stuck, and like many a term meant critically before, it was soon taken up by those who were criticized, although slowly and at first in quotation marks. There is no acceptable English translation, and so the word has been retained here in German.

A more sophisticated methodological approach, Historicism, co-evolved with *Kathedersozialismus* into the German Historical School of economics, but while the latter is also of great interest in this context, the two are not the same. This chapter tries to sort out the relation between the various concepts, using plenty of quotations from the erstwhile protagonists (translated into English, because the original German has long since ceased to be a relevant language of scholarship in economics),² and always trying to keep in mind that the issue in the current context is applicability today.

The German Historical School of economics is part of a set of historical schools in intellectual history;³ 'historical' in its specific case means to study historical data in order to learn about economic phenomena (as this is the most scientific way to do it, because there are hardly any important perennial, context-free truths in economics), not to believe in the inevitability of historical development. I will call it the Historical School in this chapter hereafter. The Historical School, then, is generally grouped into three waves. It was founded in the 1840s by Bruno Hildebrand (1812–1878) with his *Die Nationalökonomie der Gegenwart und Zukunft* (1848), Karl Knies (1821–1898) with his *Die politische Oekonomie vom geschichtlichen Standpunkte* (1883, new edn), and especially Wilhelm Roscher (1817–1894), the most eminent German economist of the mid-nineteenth century, author of the magisterial *System der Volkswirtschaftslehre* (English translation 1878). This wave is called the Older Historical School, and Roscher was at its helm.⁴ Friedrich List (1789–1846) was their predecessor, the first to analyse comparatively the economy of different nations.⁵ The movement was taken over in the 1870s by the Younger Historical School,⁶ the politically and theoretically most eminent and impactful wave, which is what concerns this chapter and which I will mean when I say (German) Historical School later on. The third wave, usually called the Youngest Historical School, which carries the movement into the 1920s and beyond, is today most closely identified with Werner Sombart (1863–1941), author of the trailblazing *Der moderne Kapitalismus* (1987), but also Max Weber (1864–1920), who after all was by profession mainly an economics professor, belongs to it to a good extent (see Swedberg 1999).

Kathedersozialismus is mainly associated with the three eminent economists: Gustav v. Schmoller (1838–1917), Lujo Brentano (1844–1931) and Adolph Wagner (1835–1917). Schmoller was, at the same time, the leading German Historical School thinker and head of the Younger School,⁷ and Brentano was one of its main figures, although he was less sure about this association, whereas Wagner was clearly not a part of it. Schmoller

² Translating the *Kathedersozialisten* is a challenge indeed, and it is even more difficult to do it well. I have profited from Ingbert Edenhofer having undertaken this arduous task, and the translations herein are largely his. Next to Ingbert, I am grateful to Rainer Kattel and Erik S. Reinert for their critical input and to Erik especially for giving me access to his magnificent library, where the core of this chapter was written.

³ For example, the German Historical School of law, especially closely associated with the legal scholar and Prussian statesman Friedrich Carl v. Savigny (1779–1861), which is still extremely relevant; see R. Backhaus (2013).

⁴ Roscher's methods programme is at Roscher (1878 [1877], Chapter III, sections XXII–XXIX, 102–116). On Roscher from the Younger School's perspective, see Brentano (1923a [1888], 2) and Schmoller (1900, 1, 117–118). On the three Older Historical School leaders see Schmoller (1900, 1, 117; 1904b, 383). Further on the three men and their emphases, see Balabkins (1988, 26–29) and Lexis (1908, 36–38).

⁵ See Lexis (1908, 22–23; 1910, 243) and Schmoller (1900, 1: 116–117; 1913, 135–137).

⁶ On the transition, see Brentano (1931, 73–74) and Schmoller (1900, 1: 118).

⁷ Generally, Nicholas Balabkins's (1988) study – a combination of biography, explanation of work and impact study – is still the best single modern treatment of Schmoller in English.

and Wagner, during the heights of their careers, held the two main economics chairs in Berlin – then arguably the pre-eminent university in the world – and were the leaders of mainstream German economics. Brentano taught in Munich and was more unconventional (more liberal, more humanities-based, non-Prussian, Catholic) and, one has to admit, a less distinguished economist, but from today's perspective not a less impactful one, because it was mostly his students who were most important in economic policy in the Federal Republic of Germany. Their relationship was neither easy nor always friendly or even civil. It is fair to say that Wagner and Brentano disliked each other, while Schmoller maintained a more or less cordial relationship with Wagner (see the respective birthday addresses: Schmoller 1913, 280–284; Wagner 1908), and a moderately good one with Brentano, which was, given their very different views on so many things, the best one could have hoped for (see Brentano 1931, 96–99; 134; Stieda 1932, 23). Schmoller was not a very social or leisure-oriented man, quite in contrast to Brentano (Brentano 1931, 106–107). None of them must have been very easy to get along with.

FROM TODAY TO *KATHEDERSOZIALISMUS*

Their work, however, while being locked into German, is easily accessible for us today, because their times can be easily recognized. Just as when their thoughts emerged, we are once again faced with a socio-economic paradigm that holds such general sway that it has even bagged its natural antagonists:

the economic train of thought of the Liberals gained such dominance over public opinion that even their opponents fell under its influence . . . The one glaring contradiction to the dominating thought that the public saw was the Social Democratic program . . . Protective tariff was merely engaged in a rear guard battle . . . From the most democratic media . . . everyone considered free trade the natural truth, eternally valid for all peoples and all times. Factory legislation was regarded as an outrageous abandonment of civic freedom to the police despotism of an absolute regime.

This may just be the very 'End of History', as presented a quarter of a century ago by Francis Fukuyama (1989). Fukuyama says that our present system is here to stay, not because a utopia is impossible, but because we have reached the best and final society already. According to Fukuyama's interpretation of Hegel (*ibid.*, 2), liberal democracy, joined with economic liberalism, in its universalization is that final form of human society. It has no universal competition any more; its last one, socialism, having not really survived the year 1989.

Add to that blatant economization, deification of efficiency and global capitalism that is said to be scientifically inevitable, partially due to the pressures of information and communication technology (ICT), and opponents of such a view worldwide face a no-win situation, or so it seems. Clearly, though, this is a typical ideology, and by definition, ideologies are wrong, because they are reduced perspectives of reality, reified by their believers because they cannot handle the complexity of reality (see Kaiser 1984, esp. 27–28). Jürgen Habermas, in his programmatic speech on the European Constitution, has summed up this model of society, as described:

- by the anthropological image of the human person as a rationally deciding entrepreneur who exploits his or her own power of labour;
- by the socio-moral image of a post-egalitarian society which has become resigned to marginalisation, warping, and exclusions;
- by the economic image of a democracy which reduces its citizens to the status of members of a market society and which redefines the state as a service company for clients and customers;
- finally by the strategic notion that there is no better politics/policy than that which makes itself obsolete. (Habermas 2001)

The earlier quote, however, is by Lujo Brentano (1931, 72–73). Referring to the times well over a century ago, for the Berlin Empire rather than for the Berlin Republic, it demonstrates problems similar to the ones we are facing today (see Peukert 1999, 445–446, 453). There are many differences as well, of course, and one of them is that the Social Democrats have moved so far towards the centre that they have to a large extent shot beyond it. A further problem is that not all, but much Third Way thinking today, as well as all kinds of ‘New Left’ approaches, is antagonistically inclined against the one agency that was, and could again be, built up against globalization and economization problems and for development, namely the state (widely understood). Suffice it here to point to the German historian Hans-Joachim Wehler’s (2001) remarks that the call of our time is exactly that of the regaining of credible state rule, which globalization and economization require more than ever.

SOCIAL POLICY AND SOCIAL REFORM

Just as now, many people in the mid-nineteenth century realized that there was a problem in spite of the general opinion:

The idea of social policy or social reform as conscious acknowledgment of the necessity for State and society to be active in bringing about a conciliation between the dispersing interests and intents of the various social strata encompassed by the State was familiar as early as the beginning of the 1860s to certain circles in Germany that were limited at first. The progressing industrialization at that time with its accumulation of workers at certain places as well as the agitation by Lassalle had alerted them, and a form of literature that was reflecting rather than imminently or even radically propagandistic in character had already established itself next to socialistic literature. What was important afterwards was the question of whether an effective organization was to be created for a socio-political practical endeavour that somehow matched this idea. (Boese 1939, 1)

Thus begins the history of the *Verein für Socialpolitik*, written on occasion of its dissolution in 1932 (it was later refounded and today still exists under that name, if not with the same aims and objectives, as the main professional association of [theoretically] German-speaking economists).

It was, in other words, clear that something was wrong, that the system led to undesirable results, and not only for those most concerned – the workers – and those representing them, that is, the Social Democracy, and especially Ferdinand Lassalle (1825–1864), it’s by far most important representative, Marx’s nemesis, largely forgotten except among

experts today. It was also of concern to most of those dealing with economic and social issues academically, because, as I would argue, their main concern was the welfare of the human person. In all naïveté, or so it would seem today, that was the focal point of economics, not abstract modelling, and this approach, together with some basic ethics, resulted in the cognizing of a problem.⁸

Even many *Anti-Kathedersozialisten* would have agreed with that proposition (see, e.g., Wolf 1899, 20–22). However, the key here is that Liberals and Socialists in our sense (including Social Democrats and Communists) would agree with the question, but their general answers would be different: the former would say that the system actually will eventually take care of the problem; the latter, that the entire structure, the system, would need to be changed.⁹ The *Kathedersozialisten* basically liked the system – including German-style monarchy – but saw it as problem-ridden, so in order to preserve and purify it, there had to be changes made through the system.

As regards the state, it is rarely mentioned, either by the *Kathedersozialisten* or by modern scholars dealing with them, that their view of the state is almost completely Hegelian¹⁰ (their general ethics is often associated with Kant, including by themselves). That is most strongly so concerning Schmoller, even more than Wagner. Schmoller understands the state not as taking individual liberty away but rather as making it possible to begin with (Priddat 1995, 92). There is, thus, absolutely no preference of the state over the individual. Precisely this is proper Hegelianism: Hegel's point in the *Grundlinien der Philosophie des Rechts* (1921 [1821]) is that the state is the sphere of genuine freedom, including individual freedom. That means that the state as such is not bad in theory, nor necessarily in practice. Realistically, reform can only come through the state, including the state at hand.

The impetus for these reforms – primarily social reforms – is thus both ethical and system-preserving. It was clear that things had to be done; otherwise, a revolutionary potential would explode. This is the approach of reformism. As Schmoller put it, 'all progress in history consists of replacing revolution with reform' (1904a, 117). And *Kathedersozialismus* can be understood as the catchword for precisely those activities: the perception of the problem, the effort to ameliorate it by policy measures, and the scientific – or better, scholarly – approach to show what is wrong. The policy measure would be that of social reform or Social Policy.

Wagner's student Heinrich Dietzel (1857–1935), not a member of any group but a very keen observer of the scene and an eminent social economist, defines Social Policy in this context thus:

⁸ It has to be admitted, of course, that this attitude would in those days not result in career death, nor was academic employment, as Rainer Kattel has quipped, merely another middle-class way of earning a living, so that scholars simply expected to be poor, from a wealthy background or lucky.

⁹ Lassallian reformist Social Democracy actually is basically pro-state and even pro-nation-state, and in that sense quite close to *Kathedersozialismus*, but it goes well beyond the latter as regards economic reforms.

¹⁰ An exception is, for example, Dietzel's (1886–1888) book on Karl Rodbertus (1805–1875), another *Kathedersozialist* and predecessor of Wagner (1886–1888). Concerning contemporary scholarship, this would not be too surprising either, were not two of the most important contemporary German rediscoverers of Schmoller – Birger Priddat and Peter Koslowski – Hegel scholars, as well. (But see Priddat 1995, 38, 87–89.)

Social reform, in the widest sense, is the epitome of everything that solidifies social peace by placating the present class struggle, which predominantly revolves around material goods. In a narrower sense, social reform is the epitome of everything by which the lower stratum of society, embittered against the prevailing order, is to be rendered more content so that the threat of social revolution is diminished. (Dietzel 1901, 3)

Turned into the positive, Schmoller's definition is this (and the parallel with a possible definition of development, time-bound though this inevitably is, is again obvious), the general aim of social reform:

consists of the re-establishment of an amicable relationship among the social classes, the abolition or reduction of injustice, an enhanced approximation to the principle of distributive justice, the creation of social legislation which furthers progress and guarantees the moral and material elevation of the lower and middle classes. (Schmoller 1904a, 118)

Brentano tells the story from his perspective when he sums up the first meeting of the *Verein für Socialpolitik* thus. The members

were inspired by the thought that every person was an end in himself, called upon to develop their abilities to the fullest. Already Christianity had acknowledged every person as an end in himself. This was the liberal idea which had sustained the emancipation of the working classes since the end of the Middle Ages. Kant had taught it in Königsberg, and in the most free development and application of abilities and strengths, Stein and Hardenberg see reason for hope and a basis for the future existence of the Prussian state. However, in order to come closer to these ideal goals, the workers needed to obtain the necessary tools. Managing this became the goal of our social policy. (Brentano 1931, 78)

METHOD: REALISM

But how to go about this on the scholarly level? The realist element is emphasized again and again by all three main protagonists. What unites them, as Brentano puts it, is 'striving for a theory of economic life which matches the facts of life' (Brentano 1923b, vii):

However, if there is a science the subject of which is life as it *really* is, it is economics. And a science of economics which only holds true under circumstances that differ from real life may well be highly interesting in theory . . . But a science of real life faces other demands than those that can be met by a science which, in order to gloss over the fact that its theorems do not correspond to reality, constantly uses the excuse that it did not intend to correspond with real life and that it was content if the science was right even if only under circumstances the insufficiency of which it concedes. (Brentano 1919, 13–14)

Roscher had already emphasized this:

We refuse entirely to lend ourselves in theory to the construction of . . . ideal systems. Our aim is simply to describe man's economic nature and economic wants, to investigate the laws and the character of the institutions which are adapted to the satisfaction of these wants, and the greater or less amount of success by which they have been attended. Our task is, therefore, so to speak, the anatomy and physiology of social or national economy! (Roscher 1878 [1877], 1, 111)

Roscher begins his book, simply, with the statement, 'The starting point, as well as the object-point, of our science is Man' (1878 [1877], 1, 52). This is not obvious and was not. But why else do we do economics? Brentano explains further:

Starting and end point of the economy are not the goods but the people, that was the opinion. The economy is not an end in itself; its task is merely to provide human beings with the indispensable means for developing their abilities and powers. The worker is a human being, too. (Brentano 1931, 75)

Schmoller, in his 1897 *Rektoratsrede*, sums up:

Thus, a mere science of market and exchange, a sort of business economics which threatened to become a class weapon of the property owners, returned to being a great moral-political science which examines both the production and the distribution of goods, as well as both value and economic institutions, and which has its central focus not on the world of goods and capital but on the human person. (Schmoller 1904b [1897], 388)

And Brentano elucidates:

Lightning, too, hits where it strikes by virtue of natural law. Yet, while civilized people make use of this natural law to render the lightning bolt harmless with a lightning conductor, you wait for the lightning flash to put your hut on fire, and then like savages, you fall to your knees before the thunder god and pray to him: only, the name of your thunder god is natural law. For you assume that by pronouncing these words, your entire task in socio-political life was fulfilled. We, however, are of the opinion that one has to use the natural laws in order to minimize pain and bitterness while helping progress to reach its natural destination. (Brentano 1931, 75)

But the key is probably realism in relativity: Edwin A. Seligman put it best in what still seems to be the best English treatment of all these phenomena:

The truly historical mind will acknowledge, with Adam Smith, the immense benefits of Cromwell's navigation act, but will rejoice, with Cobden, at the repeal of the corn-laws; he will praise, with Gournay, the attempts to unshackle industry, but will deplore Ricardo's opposition to the factory acts; he will applaud Bentham's demolition of the usury laws, but will realize the legitimacy of recent endeavours to avoid the unquestioned evil of absolute liberty in loans. He will, in one word, maintain the relativity of theory; he will divest the so-called absolute laws of much of their sanctity, and thus henceforth render impossible the baseless superstition that all problems can be solved by appeal to the fiat of bygone economists. (Seligman 1925, 17)

And Schmoller himself talks about the

absolutely wrong idea . . . which already List, Roscher, Hildebrand and Knies so vehemently contested, namely the idea of a constant standard form of economic organization above and beyond space and time, culminating in free trade, free enterprise, and free real estate commerce, only distortable by wrongful interference by State and legislation, and beyond which no progress was possible. (Schmoller 1904a, 52)

This is the key to the issue: things as they are, not things as they should be. Context not only matters, it is the main point, and it determines what economic policy is appropriate

and what not in any given case; that is, what is right and what is wrong. Brentano says, 'I think there are no absolute economic ideals. To me, the ideal economic organization is the one which corresponds to the concrete circumstances of a people as perfectly as possible' (Brentano 1931, 211). But Wagner also agrees: 'I have always, also in these matters and also recently, maintained the stance of relativity' (Wagner 1902, 9).

Schmoller speaks of 'historical and other realistic research' (1900, 1, 116) and says:

Recently, people have frequently claimed that the most significant difference between more recent realistic national economy and the older dogmatic and abstract variety was based on the difference in the role that the newer school assigned to the state concerning economy. This holds true to a certain degree but not without limitations; in some of the newer disputed issues, the opposite is the case; thus, I posit that this is not the right distinction because the opposition lies deeper. (Schmoller 1904a, 43)

Joseph A. Schumpeter (1883–1950), in his great essay on Schmoller,¹¹ is queasy about this claim:

I am caught in the embarrassing situation of finding a usable word for Schmoller's 'direction'. 'Exact' or 'realistic' are unsuitable because every scientific train of thought and every scientific method, including all theoretical ones, is necessarily both, and because both words have misleading connotations. Furthermore, the opposition of realistic–theoretical does not work because Schmoller's direction is 'theoretical' as well. If a word is necessary for illustration's sake, one can, with these reservations, at least say 'realistic'. (Schumpeter 1926, 356, n. 1 at 355–356)

But this is an epistemological error by Schumpeter, who uses his own private concept of science here. Of course, we can define science in many ways, including some that do not pay heed at all to realism or exactness – most current ones do not, including standard textbook economics (STE); they are self-referential (see Drechsler 2011).

Or we can say that scientism and realism exclude each other. The point is as follows: natural science only represents, because of its own definition – that is, systemically – a reduced part of human existence and experience. Realism, however, focuses on what is, and thus any method that reduces what is (including experiences) cannot be genuinely realistic. And although many theories could be displayed to show why science cannot fully cope with reality, Martin Heidegger summed it up especially beautifully: 'One stands in front of a blossoming tree. Only in a scientifically unguarded moment can one rightly experience its blossoming. In scientific perspective, one will let drop the experience of the blossoming as something naive' (summary by Safranski 1994, 458). In more detail:

Everyday experience of things in a broader sense is neither objectivizing nor objectifying. If, e.g., we sit in a garden and take pleasure in a rose in full bloom, we do not turn the rose into an object, not even into a thematic idea. Should I even find myself in silent devotion to the shining red colour of the rose and ponder the redness of the rose, then this is not a thing or an object like the rose. The rose is in the garden, maybe swaying in the wind. The redness of the rose is not in

¹¹ Schumpeter's Schmoller essay of 1926 is still unrivalled in scope and quality as regards a reconstruction of Schmoller, in spite of its many personal judgements, misperceptions and mistakes. In general, Schumpeter owed a lot to, and took a lot from, Schmoller (which also becomes obvious in this chapter; see also Michaelides and Milios 2009).

the garden, nor can it sway in the wind. Nonetheless I think of it and speak of it by naming it. Thus, thinking and saying is possible in a manner that is neither objectivizing nor objectifying. (Heidegger 1970, 73)

Further to Schumpeter, however, realism is a matter of motivation, of impetus, of emphasis, of prioritizing; and I think it is fair to say that STE is in the end not interested in the ‘reality connex’, at least not today (Drechsler 2011). Wilhelm Lexis (1837–1914), another *Kathedersozialist*, puts it very sharply thus:

Abstract theory may opine that its theorems do not even require verification. For positivistic economics, i.e. one based on experience, on the other hand, verification is the decisive authority; regularities inferred from deduction are viewed as assumptions as long as they have not been proven by observations in real life. Statistics provides the most exact method of observation and at the same time, it offers measures to determine the limits within which the theoretically deduced theorems correspond with experience. (Lexis 1908, 40)

The claim to realism is, then, what matters here: the desire to say something about reality. Brentano phrases it programmatically:

We do not set out to master life, neither by filling terminology with the postulations we desire to deduce from them, nor by chasing ideals that lie beyond reach. In determining the terms, we strictly adhere to reality; in our aspirations, we are content if the material conditions for a proper existence for everyone are created. (Brentano 1923a [1888], 4)

The basis of this is the insight of the relativity of the human person in space and time (Brentano 1919, 18–19). And, to continue again with Schmoller, ‘This is why I regard the theory of egotism or interest as the psychological, constant and regular source of all economic actions as nothing but infinite superficiality’ (Schmoller 1904a, 50). Humans do not maximize profits, they at best maximize benefits as perceived; as Brentano expresses in the famous anecdote in his autobiography which shows him that this is a matter of time and place: ‘When I disembarked from the boat which had taken us back from Capri to Naples and handed my suitcase to one of the boys who lay around on the pavement for him to carry, he shook his head saying: I already ate!’ (Brentano 1931, 113).

The Ordo-Liberal economist Erwin v. Beckerath (1889–1964) once said that Schmoller’s ‘tendency towards “realpolitik” occasionally, as in the debate about protective duty and free trade, made him neglect the necessity of fundamental decisions in economic matters’ (Beckerath 1962, 71). But what could this necessity be? For Lexis, ‘realistic theory attempts to adhere to concrete occurrences. Thus, it is forced to dissect the material under observation casuistically, in the process limiting the purview of its theorems but at the same time increasing their applicability in future cases’ (Lexis 1910, 18–19).

BEYOND REALISM: THE HISTORICAL SCHOOL

The popularly held assumption (to the extent that the present subject matter is in a realm where anything can be called popular) is that *Kathedersozialismus*, Social Policy motivated by the Social Question, and the Historical School are somehow identical. This is very, very broadly true, but it is actually helpful to be more specific. We may say

that *Kathedersozialismus* is the thought that is to a good extent a reaction to the Social Question, and that its methodological impetus is realism. However, how about the Historical School?

As noted, one does not need to be an economic historicist in order to be a *Kathedersozialist*, but in fact almost all historicists were *Kathedersozialisten*, and many *Kathedersozialisten* were historicists. One must also keep in mind that Schmoller and his specifically 'ethical-historical' research programme link the historicism of the Younger Historical School and *Kathedersozialismus* very directly,¹² and as Schmoller is usually granted the helm of both movements, and as he also was the most influential economist in academic policy at that time, this prompts one to conflate the two concepts.

What does the Historical School believe? Seligman sums it up thus for the Older Historical School:

the new ideas first obtained a truly scientific basis about the middle of the [nineteenth] century, when three young German economists – Roscher, Knies and Hildebrand – proclaimed the necessity of treating economics from the historical standpoint. They initiated a new movement whose leading principles may be thus formulated: 1. It discards the exclusive use of the deductive method, and stresses the necessity of historical and statistical treatment. 2. It denies the existence of immutable laws in economics, calling attention to the interdependence of theories and institutions, and showing that different epochs or countries require different systems. 3. It disclaims belief in the beneficence of the absolute *laissez-faire* system; it maintains the close interrelation of law, ethics and economics; and it refuses to acknowledge the adequacy of a scientific explanation, based on the assumption of self-interest as the sole regulator of economic action. (Seligman 1925, 15–16)

Wagner completely distanced himself from such views:

My scholarly opponents can by no means attack 'Kathedersozialismus' lock, stock and barrel, for there is not at all a unified direction, neither in method nor in theory or the treatment and direction of practical matters. In spite of criticism of its ideas, many 'Kathedersozialisten', me among them, have never vehemently opposed classical national economics, especially its leading authorities, Smith, Ricardo, and Malthus. In my opinion, much can be learnt from what classical national economics teaches and how it deals with things, more than from the 'historical school', which dabbles in relativism to such an extent that it loses theoretical clarity and edge, as well as the practical ability of taking a stance on concrete matters as eternally weighing the 'pros and cons' does not lead to anything. (Wagner 1902, 18–21, fn 1, 19–20)

So, Wagner himself shows us – in addition to delivering a nice sketch of typical criticisms of economic relativism – that he was not a historicist at all (cf. Lexis 1908, 40–41); indeed, Brentano calls him 'constantly adhering to abstract method' (1931, 83; see 93), and Schmoller told him, 'But your innermost nature drew you to the "principles", to abstract theory, to the establishment of the system' (1913, 281). We find some methodological homogeneity even among the *Kathedersozialisten*, however, in the reaction against the classical view (cf. Salin 1951, 147; Brandt 1993, 194). And 'classical' is not an accidental term, as Brentano compares it to classical sculpture taste (Brentano 1923a [1888], 2–4;

¹² On the systematic connex of ethics and history in Schmoller, see for a good introduction Shionoya (1997) and J.G. Backhaus (1993/1994, esp. 9–16); cf. also Lexis (1910, 244) and Priddat (1991). On Wagner and ethics, see Corado and Solari (2010).

see also *passim* and 1919, 11 on classical economics). Wagner, however, insisted on refining the classical school rather than building a new one (Wagner 1908, 5).

With Schmoller, the emphasis on change was much stronger, and it is Schmoller whom we can primarily credit with advancing towards an alternative theory of economic development. If one looks at the theory description part in his *magnum opus*, the *Grundriß der allgemeinen Volkswirtschaftslehre* (1900, 1, 111–124), one gets the idea quite strongly.¹³ Schmoller sums up the goals of modern – that is, his – economics like this:

1. the acknowledgment of the idea of development as the ruling scientific idea of our era; 2. a psychological-moral consideration which takes drives and emotions as a realistic basis, acknowledges moral powers and regards all economics as a societal phenomenon due to morality and the law, institutions and organizations; 3. critical attitude towards both the individualistic concept of nature and socialism, schools whose correct teachings should be extracted and acknowledged while their wrong teachings should be rejected; also the rejection of any class point of view; instead clear aspiration to always support the common good and the healthy development of nation and mankind. (Schmoller 1900, 1, 122)

We should read this very carefully, because almost no school of thought has been so much maligned as Schmoller's, and none suffers more from a distorted image.¹⁴ Brentano claimed, 'Schmoller condemned all aspirations to discover necessary causality. This was a step backwards to pre-Montesquieu times. In any case, Schmoller was more historiographer than national economist. This is proven foremost by his "Grundriß der Nationalökonomie"' (Brentano 1931, 99; cf. Salin 1951, 146–147; on Salin on Schmoller, however, cf. Balabkins 1988, 77–78). But that is simply not true: as Schmoller says, 'valuable observation leads to causal explanations. But observation always has to be at the beginning and the completed causal explanation at the end of a scientific method' (Schmoller 1904a, 297).

BACK TO THE PRESENT

What about Schmoller, Wagner and Brentano today? Compared to the importance and success of their work and to their potential relevance as a serious alternative to STE, especially in light of new social and economic movements, and in spite of some serious blind spots such as an almost complete lack of attention to the role of technology,¹⁵ the extent to which they remain forgotten, or at least relegated to history rather than possible immediacy, remains bizarre. The transposition of Schmoller into today's (mainstream) economics, as demanded by Birger Priddat (1995, 280), however, would be quite tricky:

¹³ An excellent summary and interpretation of the *Grundriß* – the only useful one available in English I know, and the book has not been translated – is Balabkins (1988, 53–67).

¹⁴ A survey of the reception of the *Grundriß* from its publication until some 30 years ago is in Balabkins (1988, 67–76). A good example of throwaway Schmoller criticism is McCloskey (2013), a review of Boldizzoni (2011), *a fortiori* so because the latter hardly deals with Schmoller at all.

¹⁵ With the exception of Sombart, and even this is not especially strong compared with his other work (see Sombart 1967, in English for a change). But as Schumpeter is so closely linked with the Younger Historical School (see note 6), it is probably legitimate to borrow any technology theory, if needed in this context, from him.

‘Sombart praised Schmoller for his “vivid outlook on world and people”, his firm roots in philosophy and history. Today, this is less praise than reproach’ (Beckerath 1962, 71).

But there has been, first, something like a Schmoller renaissance since the mid-1980s, with the works mostly published in English, even if it has remained confined to a very small, German-centred group (see Priddat 1995, 7; Giouras 1994, esp. vii–viii). And Jürgen Backhaus, perhaps the most important protagonist of this renaissance, is right when he insists on the necessity of Schmoller’s programme today (Backhaus 1993/1994, esp. 9). Admittedly, this has been exclusively focused on Schmoller, not on the *Kathedersozialisten* or the Historical School. In this context, Matthias Altmann’s *Contextual Development Economics* (2010), originally a PhD thesis supervised by Backhaus, deserves special mention, because his is the only existing monograph explicitly attempting to build development economics upon Historical School and indeed primarily Schmollerian principles. Altmann, too, emphasizes the legacy in method, especially attention to the high context dependency of economics, to a transdisciplinary governance approach to economics, and to a specific view of the human person (Altmann 2010, 195–201, 225–231).¹⁶

Second, we have some excellent works during the last decade or two, reintroducing the latter to, shall we say, the heterodox mainstream; generally not by focusing on the School itself, but centrally using it and its legacy for their narratives and arguments. These are the books by Geoffrey Hodgson (2001) and Ha-Joon Chang (2002) (supplemented by a historical account by Grimmer-Solem 2003), and Erik S. Reinert’s (2007) award-winning, truly brilliant book, *How Rich Countries Got Rich . . . And Why Poor Countries Stay Poor*.

Priddat asks, ‘Should Schmoller and the economists of the “historical school” not have realized that their own economics would also fall prey to historical relativism?’ (1995, 40). Certainly, but first of all, he actually did, as Schmoller had ‘possessed the unparalleled self-denial of stressing the relativity of his deeds every step along the way’ (Schumpeter 1926, 354).¹⁷ Second, we can say that politically, he has been incredibly successful:

Schmoller was not a classroom economist, seeking eternal verities. He knew that he was place- and time-bound. He wanted to save German masses from a violent, Communist-led revolution. He feared the Marxists and he was not popular with the fashionable crowd of ‘progressive’ leanings. As late as 1983, the pronouncement on Schmoller in America was that his methods ‘were not fit to cope with theoretical problems.’ As emphasized repeatedly, Schmoller’s concern was how to cope with the social fiasco of the laissez-faire system. His concerns were the pressing social problems of the day, not speculative hypotheses, or equations and matrices on the blackboard. (Balabkins 1988, 81)

And in this, one has to admit – and even some enemies admit it, if with a negative connotation (see e.g. Löwenich 1989, 538) – *Kathedersozialismus* achieved its goal. There

¹⁶ Perhaps even more, Altmann emphasizes the German Historical School’s contribution to the concept of economic styles as a basis for development economics (Altmann 2010, 203–224, 233–245).

¹⁷ In epistemological terms, Schumpeter sums up Schmoller’s programme very nicely: ‘approaching the material with a minimum burden of *a priori*, thereby capturing interdependencies which enter as additional *a priori*; this yields the (provisional) framework for investigation, a framework that is further refined in a continuing interplay of subject matter and mental process’ (Schumpeter 1926, 381–382; translation from J.G. Backhaus 1993/1994, 5).

arguably never was such a revolution in Germany, ever, as reform led to Social Policy and ultimately to the Social Market Economy; concepts shared by the European Union as well as much of the world (Kirkpatrick 1988), at least in performative theory, but also to a large extent in reality, embattled by crisis and competitors though it may be. In that sense, even if largely forgotten, *Kathedersozialismus* is at the root of what probably most people today perceive as the socio-economic order most desirable to live in; indeed, towards which they would like presumably to develop.

CONCLUSION

Kathedersozialismus is not a method, but methodologically it is characterized by a realistic impetus, based on the awareness that method matters and determines the outcome. The Historical School is a further development, a spin-off, of this realism, which is followed by most but not all *Kathedersozialisten*. But they are all politically motivated by the Social Question, which does not allow one to do economics as *l'art pour l'art*. To what extent Social Policy should be undertaken in order to ameliorate the problems at hand is a question of degree, not of principle; as is to what extent 'the system' should be modified – but the idea is that it should be modified, not overturned or abolished. But, as Peter R. Senn has argued in this context, if the final question of the social sciences is 'what *ought* to be done' (1997, 128), one will certainly not find the answer on an empirical basis alone.

What can be learned from *Kathedersozialismus* is, then, that realism is a question of attitude; and that social policy and economics belong together: if the economic policy is all right, much less social policy is needed to begin with. In order to find out what ought to be done, one must first find out what is. And that was the focus of the *Kathedersozialisten*. Beyond that – and that is the place of the German Historical School – the historical approach, as long as it remains a tool and not a goal, is the best way to do so. Lexis said, interestingly, 'The realistic method – which always also makes use of abstractions – and the historical method do not conflict with each other but form necessary complements for each other' (Lexis 1910, 22–23).

The legacy of *Kathedersozialismus* is a form of economics as an integrated social science with the primary focus on the real life, on people living in their world and on improving their welfare to the extent that is possible under those circumstances that cannot be changed. This focus forces one to consider methods that yield results that one can use. One has to steer the way between the Charybdis of STE-type formalism and mathematization, which become so abstract as to be self-referential, and the Scylla of historical antiquarianism – that is, the right tool becoming its own purpose – as, again, self-referentiality would set in. But once again, there arises the Aristotelian necessary combination of insight and meliorism, or of epistemology and ethics. This is the key principle and challenge of the social sciences, and one that is out of focus in early twenty-first-century STE. *Kathedersozialismus* addresses the different options and their implications in a way that makes particularly apparent what should be done and what can be done, thus providing a basis for alternative approaches to economic development, marked by high context specificity, methodological realism and addressing social problems as they exist as the main focus of and reason for it all. Seen thus, this legacy is as important today as it ever was.

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6. Chinese development thinking

*Ting Xu**

Recent scholarship on global history (e.g. Pomeranz 2000; Wong 1997) has criticized the Eurocentric portrait (e.g. Landes 1998) of the long-term backwardness of ‘the East’.¹ For more than a millennium, China had been more economically advanced than Europe with periodic ‘efflorescences’, especially in the Tang (AD 618–907) and Song (AD 960–1279) dynasties. In the field of science and technology, the work of Needham has also shown that China had been ahead of Europe before 1500. It may well be that a climacteric in the generation and diffusion of ‘useful knowledge’ occurred in the Ming dynasty (AD 1368–1644), and the shift in the locus of the generation and application of useful knowledge may be crucial to the reason and timing of the subsequent ‘great divergence’.² This chapter aims to discuss Chinese development thinking by focusing on the generation and diffusion of useful knowledge with a comparison to the European context. It also stresses the close links between Chinese development thinking and Chinese culture and institutions.

USEFUL KNOWLEDGE: DEFINITION AND CRITERIA FROM THE EUROPEAN PERSPECTIVE

Useful knowledge is often regarded as amorphous and hard to measure compared with economic factors such as labour inputs and incomes.³ It is also difficult to define the scope of useful knowledge, and indeed it is often simply equated with science and technology. Joel Mokyr’s work has been pathbreaking by showing the close linkage between useful knowledge and economic progress: useful knowledge is the knowledge that could promote economic growth. Going beyond science and technology, Mokyr’s approach has stressed the roles played by culture and institutions in the generation and diffusion of useful knowledge. For example, Mokyr argues that technology is ‘epistemological in nature’, and ‘technology change should be regarded properly as a set change in our knowledge’ (1990, 276). Flows of knowledge are influenced by institutions and incentive structures⁴ (1990, 277–302). For Mokyr, “‘useful knowledge’ is knowledge that deals

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¹ Neither ‘the East’ nor ‘the West’ is a homogenous entity. In this chapter, ‘the East’ refers to China, Japan, India and West Asia. ‘The West’ refers to Europe, especially Western Europe.

² For changes in the knowledge system as a key source of economic growth, see, for example, Reinert and Daastøl (1997) and Mokyr (2002, 2009).

³ From the perspective of economic history, useful and reliable knowledge should have economic utility or potential commercial utility. ‘Useful’ thus means commercially saleable.

⁴ See, for example, North and Thomas (1973) and Jones (2003).

with natural phenomena that potentially lend themselves to manipulation, and includes artefacts, materials, energy, and living beings' (2002, 3). This kind of knowledge is not necessarily 'true', but it is (close to) practical (2002, 2; see also Gaukroger 2006, 36). In his recent work *The Enlightened Economy* Mokyr extended one of his several definitions of 'useful knowledge' to include 'social relations' such as trust and authority (2009, 12).

To facilitate our comparison of the differences in the generation and diffusion of useful knowledge and their impact on the development paths between China and Europe, it would be helpful if we could be more specific about imprecise words such as 'useful' by developing some criteria for their content. Mokyr, for example, gives three criteria concerning useful knowledge generated by the Baconian programme, namely, knowledge that is 'cumulative, consensual and contestable' (Mokyr 2009, 42). So, useful knowledge from the European point of view should be: contestable (the knowledge is subject to adversarial practice, disputation, criticism and competition⁵); accessible (the public can get access to knowledge, and cost of access should be gradually reduced); transmissible (individual efforts could be transformed into collaboration, and knowledge could be passed on from generation to generation and therefore a collective enterprise); and economically motivated (with commercial incentives and the belief that such knowledge may enhance efficiency and economic profits). Generally speaking, the generation of the stock of useful knowledge should be linked quite well with the effective diffusion and utilization of such knowledge. But we may ask: what constituted useful knowledge and how did that shape development thinking in the context of traditional China?

USEFUL KNOWLEDGE: THE EUROPEAN CRITERIA AND THE CHINESE CONTEXT

Scholars (especially those working in the field of history of science) often equate useful knowledge with science and technology. So, I will start with a brief review of the discussions on Chinese science and technology. Ever since Joseph Needham's voluminous work demonstrating that Chinese science and technology were ahead of Europe before 1500,⁶ narratives that assumed the superiority of Western science and technology look dated. Instead, concern has been diverted to 'Chinese sciences'. Needham argued that although there had been 'primitive science' in ancient China and Greece, 'modern science' originated in 'the West'; Chinese science has contributed significantly to what he called 'universal science'. Nathan Sivin disagreed with Needham's approach, which amalgamated science and technology, and argued that Chinese superiority in technology should not be equated with a more advanced state of Chinese science. Science and technology should be treated separately. Technology was produced by craftsmen, and science was the preserve of a minority of educated people (Sivin 1984). Sivin's work has been developed by Elman. The latter argued that there were longstanding Chinese interests

⁵ For example, since the time of Newton publishing in scientific journals has been a typical activity of competition and establishing the priority in the research field.

⁶ Needham argued that 'between the first century BC and the fifteenth century AD, Chinese civilization was much more efficient than occidental in applying human natural knowledge to practical human needs' (1969, 190).

in the natural world, especially in the fields of astronomy, geography, mathematics and medicine, and that the native Chinese sciences continued to evolve from the sixteenth to the early twentieth century under the influence of the Jesuits and Protestant missionaries (Elman 2005, 2006). The Chinese produced 'modern science' 'on their own terms'. But Elman does not really give an answer to the puzzle: if the development of Chinese science proceeded at the same, or even a higher, level as that of Europe in the period 1400–1800, why did no Industrial Revolution take place in China? Moreover, if one assesses the state of science and technology in traditional China in terms of the criteria mentioned above, it can be seen that science and technology in China do not meet the standards developed in Europe.

First, most Chinese scientific discoveries and technological innovations were not 'contestable', and, as will be discussed below, there was a lack of diversity in the institutions that may facilitate disputation and competition. Secondly, in traditional China there seem to be less effective conduits through which scientific discoveries could be transformed into technological innovations. Throughout Chinese history, there were many examples of scientific discoveries, but few were economically motivated or applied to technological improvements. As Eric Jones has argued, 'Chinese experience reaffirms that the nexus between scientific discovery and technical advance was really quite weak', and in his view China lacks 'a sharp-edged experimental approach of the type that really may lead to better technologies' (Jones 1988, 75). Thirdly and most importantly, even Needham himself admitted that there were barriers to the development of Chinese science, such as the Confucian approach to nature, the lack of an autonomous merchant class, and the entrenchment of the Ming (1368–1644) bureaucracy. Elvin (1973, 315) argued that the power within society that might encourage creativity and innovation was in the hands of conservative bureaucrats. Mokyr (1990, 233–236; 2002, 223) has pointed out that the state played an important role in the generation and diffusion of innovations in China before 1400, because the landed gentry and educated elites were not interested in these matters; when the support from the government withdrew, there was no replacement, and the innovations declined. There was a huge gap between the propositional knowledge embodied in educated elites, and craftsmen with prescriptive knowledge.⁷ Qian (1985) argued that China rarely provided the necessary 'software' (that is, political-ideological conditions) to sustain intellectual creativity and innovation and cultural pluralism, even though examples of 'hardware' (for example, paper, printing, gunpowder and the magnetic compass) appeared much earlier in China than in Europe. Qian used the term 'inertia' to describe the non-development of Chinese science.⁸

Furthermore, let us probe a little more into the argument that China has developed its own 'modern science'. The idea that China has developed its own 'modern science' since the seventeenth century is often focused on the Chinese 'investigation of things' (*gewu*). This linkage was drawn by the Jesuits between *gewu* and European higher learning, *scientia*,⁹ at the beginning of the seventeenth century (Elman 2005, 4). But if this

⁷ Compare the European situation: in Europe, engineers, inventors and merchants seldom belonged to the ruling class, and the situation was more or less similar to China. But the landed aristocracy did not resist new technology, as their interests were not harmed. See Mokyr (1990, 236–258). See also Qian (1985, 105).

⁸ For a discussion of the paradox for China between development and stagnation, see Deng (1999).

⁹ The earliest uses of the Latin *scientia* in more or less the sense of 'science' go back at least to the

linkage existed, it is then hard to explain why certain kinds of Western knowledge such as medicine, anatomy and physiology, mechanics, botany, agriculture and architecture were seldom transferred by the Jesuits to China. One possible reason is that there was hardly any demand in China for the transfer of certain kinds of knowledge. This indicates that the linkage may be quite weak, partly because of the ambiguity of the meaning of *gewu*. More importantly, this linkage ignores the cultural and institutional foundations (neglecting differing views on nature and its relations with humans) of *scientia* in Europe and *gewu* in China. The European system of knowledge was shaped by the interactions between Christianity and science: 'Christianity set the agenda for natural philosophy in many respects and projected it forward in a way quite different from that of any other scientific culture' (Gaukroger 2006, 3).¹⁰

In Europe, Aristotelianism was incorporated by Christianity and was extended to cosmological inquiries in the Renaissance.¹¹ But in China religion could not play the same role as Christianity, and in many respects Confucianism is not a religion at all. Chinese philosophy draws close to ethics. Although Confucianism absorbed certain elements of Daoism and Buddhism in the early stage of its development, it eventually became secular. Therefore in China there was no equivalent to the philosophy of science as found in the European context:

In China there was no single structure of rational knowledge that incorporated all the sciences. Knowing was an activity in which the rational operations of the intellect were not sharply disconnected from what we would call intuition, imagination, illumination, ecstasy, aesthetic perception, ethical commitment, or sensuous experience. The various sciences, unlike those of Europe, were neither circumscribed by the philosophies of their time nor subordinated to theology (which did not exist in East Asia) . . . There is an obvious contrast with the educational institutions of Europe, from Plato's Academy and Aristotle's Lyceum to the medieval and early modern universities, in which the natural sciences were kept subordinate to philosophy. (Sivin 1990, 169)

For the Chinese elites, knowledge that could be considered useful and practical should concern good order or solutions to social problems such as agriculture, military issues and medicine, which are also regarded as valuable to development. Many useful inventions were not diffused and were soon lost or forgotten. There was a cleavage between knowledge held by the elites and the knowledge held by technicians, craftsmen and common people. To borrow Professor Mark Elvin's metaphor of branches and trunk of the tree to describe the system of useful knowledge, if intellectual culture is the tree, science, technology and other forms of useful knowledge are branches growing off the

twelfth century, with various adjectives including 'experimental', 'natural', 'practical' and 'secular' (see Latham 1965, 424). Thanks to Professor Mark Elvin for drawing my attention to this reference.

¹⁰ Gaukroger summarizes some Weberian approaches to stress the differences: the bureaucratic structure of Chinese society, adherence to tradition, tendency of self-effacement and avoidance of contentiousness, lack of adversarial model and corporate entities (Gaukroger 2006, 33–34). But Gaukroger (2006, 35) does not think that these are the core issues to explain the rise of a scientific culture in the West. He argues that 'if we confine our attention to two issues – the existence of a neutral space for enquiry, and the role of an adversarial culture – we can glimpse the extent of the challenge'.

¹¹ See, for example, Stark (2003), especially Chapter 2, 'God's Handiwork: The Religious Origins of Science', pp. 121–200. See also Reinert and Daastøl (2004).

same cultural trunk rather than separate trees.¹² Moreover, there is a hierarchy of the branches. Some branches were growing higher than ‘science’ and ‘technology’. Our task is to identify: what is the ‘cultural trunk’ that determined Chinese development thinking?

As discussed earlier in this chapter, Mokyr’s definition looks useful for an analysis of the importance of knowledge to the economic and industrial development of Europe. For him, useful knowledge helped to create the material culture and paved the way for the First Industrial Revolution, especially in Britain from 1700 to 1850. But Mokyr’s definition of useful knowledge (setting aside the human mind and social institutions) may be too narrow to comprehend useful knowledge as conceived, valued and embraced by top-level elites in pre-modern China. They saw governance, education and the moral transformation of both individuals and society as the priority for their society and empire. What constituted the most useful knowledge in the thought of the Chinese top-level elites may be fundamentally different from that of their European counterparts; the Confucian elites characterized such knowledge as *xiu qi zhi ping*, namely, self-cultivation, family management, national administration and the maintenance of the whole social order.¹³

Thus a wholistic conception of useful knowledge is not universal. It is dependent upon or embedded in its cultural and institutional contexts. In the following discussion, I will examine the interplay between the Chinese conception of useful knowledge, namely, *gewu zhizhi*, and one important aspect of their development thinking, *jingshi zhiyong*.

USEFUL KNOWLEDGE IN CHINA: THE INSTITUTIONAL CONTEXT

Useful knowledge is embedded in or closely related to formal (or informal) institutions such as universities, academies, networks of intellectuals, libraries, markets, the legal system, the notion of trust, civil society, the publishing industry and the trade of books,¹⁴ and so on. Such observable institutions provide spatial and social sites for the generation and diffusion of useful knowledge.¹⁵ I will now focus on the educational system as it operated in traditional China. This is an important institutional dimension within which to examine the kind of knowledge and the manner in which it was generated, shared, accessed and diffused.

In traditional China, education (*jiao*) was closely linked to governance (*zheng*). Education was established to sustain an ideal social order. Governance did not just mean governmental administration, but more importantly, it embodied a mission of ‘rectifying thought and regulating conduct’ (Liu 1988, 37–38). To fulfil the purpose of governance, education was not limited to teaching and schooling, but meant more broadly ‘instilling and perpetuating a moral standard of social order’ (Liu 1988, 38). Moreover, education

¹² Elvin (2004, 56): ‘we have also to consider whether “science” and “technology” in this age [1600–1800] were more like branches growing off the same cultural trunk than separate trees’.

¹³ Knowledge on good governance is uniquely Chinese (*xiu qi zhi ping*). This was determined by China’s non-feudal tradition. Under European–Japanese feudalism, there was no special need for good governance. China was an empire, run by bureaucrats (not aristocrats) who had no ‘birth right’ to rule. So, good governance was vital for them to hold office. Thanks to Dr Kent Deng for raising this point.

¹⁴ See Xu (2013).

¹⁵ See Inkster (2006).

helped in ‘transforming’ (*hua*), as shown in the compound *jiao-hua* (educating and transforming) (*ibid.*). Therefore, as Liu summarized, ‘the ideal of Confucianism as it evolved through the centuries was to fulfil all these functions – governing, educating, improving, and transforming individuals, society, and rulers’ (*ibid.*). The conception of useful knowledge in pre-modern China is thus closely related to how to govern, educate and transform both individuals and society.

The Tang was a time when the dominance of the medieval aristocracy of China came to an end. The Northern Song (AD 960–1127) marked the rise of meritocracy by the continuing development in the civil service examination system and bureaucratic government. The Southern Song (AD 1127–1279) also deserves special examination as it is the period in which neo-Confucianism became a powerful school of thought. Neo-Confucianism is often called the ‘Cheng-Zhu school’: Cheng refers to the Cheng brothers – Cheng Yi (1033–1107) and Cheng Hao (1032–1085), Northern Song intellectual ‘pioneers’; while Zhu refers to Zhu Xi (1130–1200), a Southern Song synthesizer of thought. The scope of neo-Confucianism is a matter of some debate. This chapter adopts the more narrow definition, that is, neo-Confucianism which refers to the Zhu Xi school of thought, or *lixue*, also known as the school of principles. Generally speaking, *li* refers to the principles that give all things their form. But, again, there are differing understandings of the concept of *li*.¹⁶ *Lixue* was also called *daoxue* (the school of ‘the Way’) in the Northern dynasty. ‘*Dao*’ originates from Daoism (*daojia*), and its definition is fluid.¹⁷ To search for the *li*, a Confucian needs to examine himself inwardly so that he could further understand the outside world. Therefore, in the concept of *li*, as Nakayama (1973, 40) has argued, ‘moral issues and the law of nature remained undifferentiated; thus it played an inhibitory role in the development of the modern way of thinking’. *Li* or *tianli* (the principles of universal heaven, or heavenly principles) is thus not just a purely philosophical, abstract and meta-physical system but includes moral, social and political concerns.

The Song was a most developed bureaucratic state, and it pursued a policy of treating its bureaucrats well (Liu 1988, 90). Officials were trained and selected by means of a system of civil service examinations. The method of selection was reformed in the Northern Song when anonymous examination procedures were introduced in order to promote fairness and suppression of nepotism in selecting officials. However, the new procedures were criticized by Confucians for not taking virtue into account. The critics argued that morality was ignored by students as they set their sights on examination success rather than pursuing ‘the Way’ (Chaffee 1995, 17). The Northern Song reformers advocated an empire-wide school system¹⁸ but were disappointed by the misconduct of the students, including a tendency to cheat in the exams. In contrast, Southern Song neo-Confucians emphasized self-cultivation and argued for a clear separation between education and examinations (Chaffee 1995, 17). The teaching of neo-Confucianism was through lectures, dialogues and discussions, and private teaching (especially in private

¹⁶ See Qian (1985, 117).

¹⁷ Confucianism is not exclusive to other groups of thought and ideas, rather it has acquired ‘a host of eclectic components’ that are practical and acceptable (Liu 1988, 39). Many elements of Buddhism and Taoism were absorbed by Confucianism.

¹⁸ In the late Northern Song, governmental schools spread to most prefectures and counties, and education was made more accessible. Landholding and the development of commerce provided the economic base for an increase in governmental schools. See Chaffee (1995, 16).

academies) which proliferated in the Southern Song, with an emphasis on self-cultivation rather than preparation for the exams.¹⁹ A proper curriculum was set out by a good master starting from the Confucian classics of the 'Four Books' (*sishu*) – the *Great Learning* (*daxue*), the *Analects of Confucius* (*lunyu*), the *Mencius*, and the *Centrality and Commonality* (*zhongyong*) (Liu 1988, 138–139).²⁰ Nevertheless, neo-Confucianism was eventually incorporated into the state orthodoxy and thus become a rigid doctrine, especially under the Ming (AD 1368–1644). Taken together, as Chaffee (1995, 142) argues, 'the cultural unity created, in large part, by schools and examinations, was an important contributing factor to the political unity of late imperial China'. Nevertheless, that unity was one in which 'the moral and natural realms were merged' (*ibid.*, 19).

In terms of curriculum provided by the public schools and especially for the purposes of the exams, there were differing views about the relative value of specialized expertise and general education, especially during the Song. In the Tang, the mainstay of the examination content was to be qualified as 'metropolitan graduates' (*jinshi ke*) which involved extensive study of the classics for the purpose of choosing officials, but the curriculum also included various specialized subjects such as legal knowledge (*mingfa*) as well as mathematics (*suanxue*) and medicine (*yixue*). However during the Song, specialized subjects were virtually abolished (Song and Wang 1999, 312, 429). Among the debates over a curriculum for higher education there were two major schools of thought: Wang Anshi's (1021–1086)²¹ utilitarianism, and the school of the principles led by Zhu Xi. The reforms of Wang Anshi in the Northern Song emphasized a detailed knowledge of institutions and economics. Practical subjects such as law, military affairs and medicine and, a little later, mathematics were added to the examinations. But Wang's reforms failed, and the generalist approach to curriculum-setting prevailed, putting more weight on morality (Chaffee 1995, 19). The curriculum underwent important changes with the rise of neo-Confucianism (that is, the school of principles). The generalist style curriculum created uniformity not only in subjects to be learned but also in modes of thought, for example the attitudes toward authority such as classical texts. The Song educational system became a model for the institutional foundations for systems for the Yuan, Ming and Qing dynasties. For example, in the Yuan dynasty (AD 1271–1368), the regulations for the civil service examination in 1313 decreed that the answers to the Four Books were to follow the commentaries by Zhu Xi. *Sishu Jizhu* (Collected Annotations of the Four Books) (written by Zhu Xi) thus became the official reference for the candidates taking the civil-service examination. In the Ming, Zhu Xi's version of neo-Confucianism was established as the orthodoxy by Ming emperors.

¹⁹ Although private academies were initially established in rural areas, the locus was gradually shifted to urban areas. Private academies were also incorporated by official schools, and the aim of teaching and learning was the preparation for state examinations.

²⁰ They are all Confucian classics. Zhu Xi took the *Great Learning* and the *Centrality and Commonality* out of the *Book of Rites* and combined them with the *Analects of Confucius* and the *Mencius* as the 'Four Books'. Zhu Xi suggested that the study should start from the *Great Learning*, and then follow the orders of the *Analects of Confucius*, the *Mencius* and the *Centrality and Commonality*.

²¹ Wang Anshi (1021–1086), chief councillor and reformer in the Northern Song dynasty.

DIFFERENT LEVELS OF USEFUL KNOWLEDGE: THE ROLE OF THE ELITES

Mokyr argued that 'for better or for worse, the history of the growth of useful knowledge is the history of an elite: the number of people who augmented the sets of propositional and prescriptive knowledge is small' (2002, 291). Elites are important as they are the agents who either promote or restrain the generation and diffusion of useful knowledge. In traditional China, the people who could be characterized as members of an elite were very diverse. Their status was closely related to the levels of education they had received and their success in examinations.²² Elites may include literati and gentry (*shi*), although there are no clear boundaries between the two.²³ Literati mastered classical studies and held knowledge of lineage rituals. They were land-holding but did not necessarily hold official positions. Gentry enjoyed a Confucian education in the classics but also held power as governmental officials at local and central levels, usually through passing civil service examinations or by way of recommendations from senior officials. As such, gentry (also called scholar-officials) constituted the ruling class (Elman 2005, xxi; Liu 1988, 14). There were no clear boundaries between literati and gentry, but their social and cultural status was dependent on whether they passed the civil service examinations. From the Sui onwards, civil service examinations were gradually integrated into the elite culture. Although holding land secured the financial sources and paved the way for the preparation of examinations, it did not carry the same weight in access to political power, higher social status and prestige of learning (Liu 1988, 15). As gentry elites were both scholars and officials, their intellectual and political activities were intertwined (Liu 1988, 15). This also gives rise to the question regarding the definition of 'intellectuals' within the elite group. An intellectual had acquired a record of both outstanding scholarship and a governmental post. His concern for universal values of the state and society could exert profound influence on trends in thoughts and public affairs (Liu 1988, 15).

There was, moreover, a hierarchy within the elites. For example, if we consider literati without official appointments to be the lowest-status group and the gentry to be an intermediate level in the group, then intellectuals were the top rank of the elites. Although different groups of elites all played important roles in education and acted as controllers and mediums for the transfer of knowledge,²⁴ they might prefer and promote different forms of knowledge. For example, they often placed more weight on statecraft, while their emphasis on universal values often led them to downplay the specification in academic learning. They accordingly paid attention to agriculture, military affairs and medicine as well as mathematics and astronomy. Thus there was a hierarchy of knowledge in traditional China which corresponded to the hierarchy within the status of elites. Different forms of knowledge, however, did not necessarily exclude each other, because they were produced and located under an overarching institutional framework as discussed in the previous section. Although different groups of thought did emerge from the orthodox Confucian way of thinking or the state ideology, they were all constrained by

²² Elites were also engaged in other diverse activities including poetry composition, art appreciation, philanthropy, the patronage of intellectual networks or associations, and local governance.

²³ For a discussion of the literati or the gentry (*shi*), see, for example, Deng (1993, 18–28).

²⁴ See, for example, Deng (1993).

an entrenched institutional framework which was closely linked to the civil service examinations and bureaucracy. I will take the role played by Xu Guangqi (1562–1633) in the generation and diffusion of knowledge as an example, and compare it with the examples of other lower-status elites.

Xu was vice-president of the Board of Rites and stood at the top of the elite. In collaboration with the Jesuits, such as Matteo Ricci (1552–1610), Xu translated many Western works on mathematics and astronomy into Chinese. He even converted to Christianity. Xu was the author of the *Nongzheng quanshu* (A complete treatise on agricultural administration)²⁵ and the compiler and translator of the *Taixi Shuifa* (Water methods from the West; finished in 1612), written by Jesuit Sabbathinus de Ursis (Xiong Sanba). He came to advocate for ‘concrete studies’ (*shixue*)²⁶. Subjects such as agricultural administration and water control were regarded by Xu as ‘concrete knowledge’ that could bring tangible general benefits. Western learning conveyed by the Jesuits was seen by Xu as solid learning, as the way it produced knowledge could be verified by proper methods. Xu’s own work on agricultural administration reflected his experimental attitude towards the accumulation of knowledge. But for Xu, subjects such as agriculture and water control were ‘useful’ because they were relevant to statecraft and could contribute to the welfare of the state and the livelihood of the people (*guoji minsheng*).²⁷

One of the important ways through which the gentry contributed to the generation and transmission of useful knowledge in China was in the *nongshu* (treatise on agriculture),²⁸ because the gentry treated agriculture as the root (*nongben*) of practical knowledge that could maintain the social order and promote development. The *nongshu* writing was (one kind) of statecraft writing, and top-level elites like Xu Guangxi wrote *nongshu* from the perspectives of public servants in order to instruct the administration of officials.²⁹ That is why Xu’s *Nongzheng quanshu* received the patronage from the Chongzhen emperor (Chongzhen is the reign-title of the Ming emperor Zhu Youjian, r.1627–1644) who gave orders to print and disseminate the book (Bray and Métailié 2001, 355). We can compare the works of Xu with that of a lower-level learned man Song Yingxing (1587–1666?) in the Ming dynasty. Song became an ‘advanced scholar’ through examination at the county level but failed subsequent higher-level exams many times. At the age of 47, he eventually became a minor official in the county in charge of education. Song’s work *Tiangong kaiwu* (*The Exploitation of the Works of Nature*) was first published in 1637 and included not only discussions of agriculture but also descriptions of important forms of commodity production including sugar, textiles, ceramics, salt, colas and various metals and precious stones. In his work he stressed the importance of experiments in the investigation of things. However, unlike the *Nongzheng quanshu* and the *Qimin yaoshu*, the *Tiangong kaiwu* was not included in the *Siku quanshu*³⁰ (the annotated catalogue of books in the

²⁵ The writing of the *Nongzheng quanshu* was a group enterprise, as it was completed, revised and edited by young scholars after Xu’s death. See Bray and Métailié (2001, 323).

²⁶ *Shi* could be translated into English as ‘solid’, ‘practical’ or ‘concrete’.

²⁷ For a discussion of Xu Guangqi see, for example, Jami et al. (2001).

²⁸ For a discussion of the *nongshu* see, for example, Deng (1993).

²⁹ Bray and Métailié (2001) made a distinction between writing *nongshu* as a public servant and as a private landlord.

³⁰ The compilation of the *Siku quanshu* started in 1773 and lasted for ten years. It was the largest-scale official book compilation in Chinese history.

comprehensive library in four classes) compiled by the order of the Qianlong emperor (r.1735–1796), and failed to be widely disseminated, and was subsequently lost.³¹

USEFUL KNOWLEDGE AND DEVELOPMENT: *GEWU ZHIZHI* AND *JINGSHI ZHIYONG*

Gewu zhizhi

Gewu zhizhi (investigating things and extending knowledge), an important concept in Confucian thought, is often regarded as the Chinese equivalent to ‘Western science’. In Western-style schools set up in the late Qing, subjects such as physics and chemistry were often called *gezhi*, a name derived from *gewu zhizhi*. However, the conception of *gewu zhizhi* transcends science and technology. To understand the meaning of *gewu zhizhi* correctly it is necessary to trace its historical origins. The term *gewu zhizhi* originates from the *Great Learning* (*daxue* written c.500 BC) and is pregnant with complex meanings. The *Great Learning* was part of the *Book of Rites* (*lijì*) and provides eight steps (*bamu*) for the cultivation of the elites according to classical ideals of higher education, each in turn a precondition to the next: investigating things (*gewu*); extending knowledge (*zhizhi*); making their thoughts sincere (*chengyi*); rectifying their mind (*zhengxin*); cultivating the self (*xiushen*); regulating their families (*qijia*); governing the country (*zhiguo*); and making the whole social order tranquil and happy (*pin tianxia*) (*Daxue*, section 1 in Zhu Xi’s rearrangement of the text). Nothing in the *Great Learning* defines *gewu*. Once the concept was taken out of the *Book of Rites* and rearranged as one part of the Four Classics by Song neo-Confucians, the real meaning of *gewu* was subject to various explanations. It would be easy to fall into a trap by regarding *gewu zhizhi* as an equivalent to scientific investigation and a top priority in these eight sections and to ignore their interrelations and social and moral contexts. The book of *Great Learning* is a treatise in moral philosophy that includes and seems inseparable from reflection on nature and natural phenomena. For example, it says: ‘Things have their root and their branches, and affairs have their end and their beginning’ (*wu you ben mo, shi you shi zhong*), the root and the branches of things should follow the order of the mind (*xin*), the self (*shen*), the family (*jia*), the country (*guo*) and the whole social order (*tianxia*) with the mind as the foundation, while the beginning and end of affairs should follow the order of investigation (*ge*), extension (*zhi*), sincerity (*cheng*), rectification (*zheng*), cultivation (*xiu*), regulation (*qi*) and governance (*zhi*), with maintenance (*ping*) and the tranquillity and happiness of the empire as the ultimate end. Thus we should read *gewu* by emphasizing its moral and social messages. The ultimate goal is to govern the empire and maintain the social order through cultivation of the self. Therefore within the eight steps, *gewu* is inferior to other steps and considered ‘the inferior study’ (*xiaxue*) by the top-level elites.³²

Gewu included the studies of both natural phenomena and ethics. Principles are

³¹ In the 1920s China obtained copies of the book from Japan. Later the Beijing Library recovered the original copy from a private collection of books.

³² For example, even Xu Guangqi, who was deeply influenced by Western science, still considered Western science ‘the inferior study’ (*xiaxue*).

seen as the guidance for moral actions including the investigation of things as a kind of moral activity. But what ‘principles’ means seems quite obscure and abstract. Compared with moral principles, the study of natural phenomena looks less important (see Peterson 1975, 377; Graham 1958, 79). For Zhu Xi, intellectual learning and self-cultivation should be combined; that is, an integrity of ‘abiding the reverence’ (*jujing*) and ‘searching for the principles’ (*qiongli*) (see also Peterson 1975, 14). Thus knowledge should be socially relevant, and his commentary became the orthodox interpretation of *gewu*.

Jingshi zhiyong

The school of evidential research (*kaozheng xue*) that was pioneered by Gu Yanwu (1613–1682) and others in the early Qing flourished in the Qianlong (r.1735–1796) and Jiaqing (r.1796–1820) periods, especially in the Jiangnan region (including areas such as Suzhou Changshu, Songjiang, Wuxi and Zhejiang). Fang and Gu shared the view that knowledge of the world could be carefully and impartially observed and verified by (textual or historical) evidence. For Gu and other scholars involved in the school of evidential study, ‘things’ (*wu*) are understood primarily as human affairs rather than physical objects and natural phenomena. For them, useful knowledge really meant statecraft or knowledge that could be useful for a properly governed empire. To pursue such knowledge, the school of evidential study devoted itself to the historical and textual studies (see also Peterson 1975, 400–401).

Thus there were two major areas where scholars involved in the evidential research movement could conduct their objective investigations: the natural phenomena, and textual and historical documents related to human affairs and society. If research had been done in both areas, the new research scholarship in the seventeenth century might have been transformed into ‘modern science’. But for several reasons this did not happen. First of all, one needs to consider the whole intellectual environment in that period. The knowledge system as well as the development thinking in the late Ming and early Qing could be characterized as *jingshi zhiyong*: that is to say, its primary concern was to govern the world through the study of the classics. Trying to reconstruct ‘true knowledge’ or sagehood that was thought to be lost or distorted for centuries, scholars delved into the study of subjects included philology, epigraphy and palaeography. This brings us back to the texts of the Song dynasty, which advocated the study of the practical issues related to society, politics and economy through the exegeses of the classics so as to achieve the aims of social reform. For example, Lü Zuqian (1137–1181) in the school of Jinhua had emphasized the study of classics and history (*jingshi*) in order to solve practical social problems. The Southern Song scholar Ye Shi (1150–1223) and other scholars in the school of Yongjia had argued that *jingshi zhiyong* should be combined with utilitarianism. They also argued that the state should pay attention to commerce. The study of *jinshe zhiyong* achieved its prominence in the late Ming and early Qing. The pioneers in this study included Gu Yanwu and Huang Zongxi (1610–1695). Their research areas included politics, economy, military affairs, law, geography and local custom as well as natural phenomena. But they accorded the highest priority to statecraft within a framework of political ethics, and their ultimate goal was to find a proper social order and governmental format to benefit the national welfare and the people’s livelihood. That is

why the knowledge of construction and expansion of canals, irrigation works and public granaries became so important for them.

CONCLUDING REMARKS

This chapter has attempted to show that the forces which decided whether knowledge was useful or certain kinds of knowledge were more useful than others and diffused more smoothly lay in the institutional and cultural spheres. For the Chinese top-level elites, useful knowledge really referred to knowledge that was practical and morally, socially and even politically relevant, and that would bring general benefits to the welfare of the state and the livelihood of the people. For the Chinese elites disciplines that could be characterized as ‘useful knowledge’, such as astronomy, hydraulics, mathematics and geography, really meant techniques of statecraft, which are fundamental to development.

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7. The economic cycle of Imperial China and its development

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Imperial China is known to have been the most prosperous, well-organized, advanced and innovative economy in the world. However, starting more or less from the Age of Discovery and Renaissance, Western Europe gradually caught up on China. The essence of this catching-up process is that Imperial China failed to generate a modern economy, and consequently fell behind. This chapter discusses one of the internal reasons for this failure: the conflict between the basic principles according to which Imperial China was organized and the real economic situation caused a certain economic attitude and a certain way of economic management of the empire which led to cyclical crisis in the empire's economy, unstable agriculture and underinvestment in crucial sectors in the modern economy, namely manufacturing and commerce.

THE PRINCIPLE OF IMPERIAL CHINA AND ITS ECONOMIC ATTITUDES

The basic political principle of Imperial China was established by the practice of the first two imperial dynasties (221 BC to AD 8), which could be regarded as 'the First Empire of China', and henceforth the imperial system was accepted by the Chinese people over the following nearly 2000 years as an ideal approach to organize their country politically (Huang 2008, 42–43; Loewe 1986, 103–110). The most important feature of the Chinese imperial principle lay in unification and centralization.¹ The whole country should be unified, and all of the power within the country should be centralized on the emperor himself, so that the peace could be maintained and order established. When Mencius, the secondary sage in Confucianism, was asked 'How can the kingdom be settled?', his answer was, 'It will be settled by being united under one sway' (Mencius 2010, 9–10).

According to the principle of Imperial China, 'Heaven' and 'Heaven's Law' is regarded as the source of all legitimacy. The agent of Heaven is 'the Son of Heaven', namely, the Chinese Emperor. The duty of the emperor is to obey and execute Heaven's Law to govern the people. There was no such thing as 'international' affairs in the mind of the people of Imperial China. All the political bodies under Heaven, namely in the land known to the Imperial Chinese people, should be unified and centralized by the Son of Heaven. At the very least, they should ritually respect the supremacy of the emperor.

The burden of that sacred duty on the emperor's shoulders needed a large number of assistants, in the form of public servants who in Imperial China were to represent the

¹ On the following interpretation on the principles of Imperial China, see Lv (2005, 262–284), Yi (2007, 59–106) and Tao (1948, 56–59).

emperor in regional and local areas. There was no such concept as 'local government' in Imperial China. All the land in the empire should be, directly or indirectly, under the rule of the emperor and his central government. All the officials holding local and regional power should only be the representatives, agents and executors of the emperor. No region had the right to decide its own affairs by itself.

The metaphor of the relationship between emperor and people is shepherd and sheep. The emperor and his assistants use Heaven's Law to 'herd' (literally the word used in China) the people. The duty of the emperor and his assistants is to cherish the people, to civilize them, to bring them peace and security. The duty of the people is to respect and obey the emperor's authority, to pay taxes and fulfill their duties, accepting education and civilization from the emperor. Imperial China's taxonomy of its people had four categories of occupation: the scholar, the farmer, the artisan and the merchant. The sequence reveals the status of these four kinds of people in the empire. The scholars are educated by Heaven's Law and qualified to be assistants to the emperor, so they are the most important. The farmers produce food, which is the most important good satisfying people's paramount demand in an agricultural society, so they hold the second place. Artisans can produce the tools and necessities, but can also produce luxury goods which are not of much practical use for the empire, so they are less important than the farmers. The least respectable occupation is that of the merchants, because they produce nothing but just buy cheap and sell dear to make profit for themselves. The attitudes of the empire towards all four kinds of people also differed. The scholars were granted the highest reputation and social status. The farmers were regarded as the source of national wealth, and lived under the protection and the promotion of the state. The artisans had always been directly controlled by the state for most of the history of Imperial China, and artisan identity was hereditary. The merchants were the most ill-reputed; regarded as parasites of society, they forever suffered the oppression of the state.

This is the principle of Imperial China. It regulates the relation between emperor and public servants, central government and local government, government and the people. The principle aims at centralizing all political power, from the people to the government, from local to central government, from the public servants to the emperor.

The principle of Imperial China provided the answers as to how to organize an ideal empire and establish its legitimacy. And the principle was observed continuously throughout the history of Imperial China. There were deviations from the principle over history, but the principle limited the degree of deviation and always sought to restore the situation. The principle guided the emperors and their assistants in organizing the empire in every aspect, and so extended to the different aspects of society: political, economic and ideological.

In order to realize the emperor's full control over society, the national economy was to be maintained in a certain form as the economic basis of the empire. This entailed certain approaches, comprising three basic principles.

First, one of the most fundamental economic principles of Imperial China is 'stressing agriculture and restraining commerce'.² This principle was generated in the organizing

² On the interpretation of this principle, see Lv (2005, 38–66), Fu (1980, 608–668), Zhang (1988) and Zeng (1983).

principle of the First Empire of China, the aim being to establish 'a static agrarian economy resting on the work of a contented and settled peasantry, undisturbed by the movements of profit-seeking merchants and producers' (Bodde 1986, 38). And this principle gained 'a dominant place in later Chinese society' (ibid.). The principle of Imperial China implies that the emperor and his government should take on full-scale control of the society. Therefore the social and economic structure must be as stabilized as far as possible. Otherwise accidents beyond the emperor's control would occur and shake the supremacy of the emperor and his centralized, unified political structure. Thus, the static, isolated and settled small-peasant economy, practically dispensing with market exchange and the possibility of development, was embraced as the fundament of the country. In comparison, commerce and manufacturing, the latter either affiliated to the commerce sector or owned by the state, would bring mobility to the population and the chance of change in the economic structure, and were naturally regarded as antagonistic towards the emperor's rule. Thus private businessmen were treated with hostility by the government throughout the history of Imperial China, private commerce and the manufacturing sector being rigidly supervised and controlled by the state.

Second, another approach shown by Imperial China towards the economy was hostility towards any kind of concentration of wealth in the hands of people beyond the control of the emperor. No matter how wealthy the people might be, they should never be a threat to the emperor himself. Nevertheless, concentration of wealth in the hands of the people formed a source of economic power beyond the emperor's control, empowering the wealthy to challenge representatives of the authority of the emperor at the regional or local level, or in the certain areas of society, such as control of the market price. Thus the individuals and clans that possessed enough wealth to influence the authority of the government were regarded as enemies of the empire. In the second century BC, the Emperor Wu of Han, one of the greatest emperors in Chinese history, forced the clans that had become rich and high-handed to emigrate from their homeland in order to 'eliminate the potential hazard', being seen as 'disturbing the order among the common people' (Ban 1997, 2802). In the mid-eleventh century, Wang Anshi, one of the most influential economic reformers in Imperial Chinese history, regarded the bourgeois who possessed enough wealth to manipulate market, prices and interest rate as competitors of the emperor in controlling the people, usurping control over the economy from the state (Wang 1959, 114). In the late fourteenth century, the Emperor Hongwu, the founding father of the Ming Dynasty (1368–1644 AD), 'frequently issued policies to subsidize the poor but restrict the rich', in order to 'punish those despotic rich men who oppressed the poor at the end of the last dynasty' (Zhang 1974, 1880). Restricting the concentration of wealth in the hands of the people was another economic principle of Imperial China which lasted throughout the history of the empire. However, an important point here is that imperial disfavor fell only on the rich who had acquired their wealth by themselves, and not through the grace of the emperor. Actually, in Imperial China the emperor was always willing to grant large amounts of wealth to his family members, his meritorious statesmen, and other people he trusted and liked, who thus became ramifications of his power and wealth rather than a threat.

Third, another important economic principle in Imperial China was egalitarianism, an important aspect of Confucianism. Confucianism aimed at equal economic status among the people so that they could benefit from fair shares in the national economy, and sought

to avoid economic exploitation and excessive gaps between the rich and the poor, so as to eliminate social conflict and injustice. Mencius regarded the fact that 'the rich men's dogs and swine eat the food of men, and the government takes no restrictive measures' as a failure of governance (Mencius 2010, 5–7). The Confucians in Imperial China 'aimed at restricting the bourgeois and the exploiters to relieve the common people and the poor, or restoring the egalitarian land distribution system of ancient times, the ideal being that all should enjoy economic welfare equally' (Ma 1986, 34). History teaches us that the egalitarianism in Confucianism did not effectively close the gap between the poor and the rich, but it provided a protective umbrella and legitimized policies restricting the concentration of wealth and commerce likely to generate economic gaps and excessive enrichment.

The principles and economic attitudes of Imperial China defined an ideal economic system: the small-peasant economy equipped with iron tools and draught animals but still relying on physical labor. The small farmers should be self-sufficient. They should till on their own small plots of land and work in their homes to satisfy their demand for food and simple manufactured goods, so the productivity of the economy should be neither too low nor too high: excessively low productivity could not sustain the cost of organizing a large empire; excessively high productivity would lead the situation out of control; productivity should be stabilized on the criterion that apart from working hours in tillage, the small farmers only had time for domestic manufacture. The independent artisans and craftsmen should only respond to the demand of the government: public buildings, ceremonies and defense. Market trade and businesses should be kept at the lowest possible level. Thus, in the social pyramid structure of this economy, below the emperor and his public servants there were countless scattered, basically homogeneous and self-sufficient small farmers whose economic conditions were actually very fragile, and who needed the protection and help of the state for operations like creating public irrigation systems and providing social relief to live through bad harvests, but without any resources or reasons to oppose or encroach upon the authority of the emperor and his local representatives.

However, although the organizers of the empire had a very clear blueprint of the kind of national economy they wanted, it was impossible for them to crystalize the national economy in a certain form. The economy had its own internal dynamics, and the real economic situation facing Imperial China always exceeded the designs of the organizers. As the economy developed, polarization always occurred between the landowners and the small farmers. Some farmers were bankrupted and became tenants or were driven to flight, while others lived in poverty and had to rely on rural usury to survive; on the other hand, some took over extensive plots of land and made a living on rent and usury. Growth in manufacturing and commerce always enriched the businessmen and bourgeois, increasing the scale and power of commercial capital beyond the control of the empire. Thus the internal dynamics of the national economy always led to conflict between the real economic situation and the ideal economic basis of the empire, in turn forcing the imperial government to take steps to draw the economic situation back to the ideal status. Interaction between the imperial government and the national economy led to crisis in agricultural production, manufacturing and commerce, reflecting the rise and fall of different dynasties.

THE AGRICULTURAL CRISIS CYCLE

Dynasties would emerge from wars and chaos when agriculture production was in depression: vast areas of land were deserted, the farmers exiled, the large estates broken up and production interrupted, the population decreasing. The founding fathers of a dynasty would then take steps to restore the economic basis of the empire: the imperial government would distribute deserted arable lands, lands whose ownership became unclear in times of chaos, to the farmers and the refugees to form a small peasant economy. For example, at the beginning of the Second Empire of China (as from the late sixth century AD), the empire applied the 'Equal Land Allocation System' aiming at 'maximum use of land and level of peasant productivity by making generous grants of land to the peasants, while imposing limits on the excessive accumulation of property in individual hands' (Twitchett 1979, 24–25); the government would reward land reclamation and good harvests to promote production, as in the early days of the First Empire (Ban 1997, 1127–1135). In this process, the empire would restrict the landlords' occupation of land to form the ideal economic base, with reconstruction of the small peasant economy.

As time went by, the peace and security of the unified empire, the agricultural promotion policies and exemption from land annexation and rural usury led the small peasant economy to its golden age: the population increased, the small farmers were generally well off, extensive arable lands were reclaimed, the water conservancy facilities were well maintained and functioned fully, and wealth was continuously generated by small farmers for the empire, which also enjoyed a golden age. The prosperous economy formed a solid and abundant tax base and source of soldiers for the empire. This stage would see full realization of the principles of Imperial China: the Chinese emperor enjoyed supremacy under 'Heaven', in both domestic and external diplomacy. At home, the emperor could apply effective measures to maintain his political authority and the economic base of his empire; diplomatically, he could gain territory, conquer barbarian enemies and subdue the dependent countries.

However, this golden age could not last forever. When the empire had to impose heavy tax burdens on the farmers, or natural disasters occurred, the rudimentary small farm economy would show its fragility. When the small farmers could no longer afford the cost of living, taxes and reproduction, they had to borrow from the rich farmers, landlords or the rural bourgeois. Often they would be 'entrapped in a spiral of debt', and 'ultimately had to dispose of their land', so 'land sold in this way came into the hands of local wealthy people, merchants or usurers' (Sadao 1986, 557). Besides, the emperors usually granted land to meritorious statesmen, nobles and royal clans. The emperors were averse to anything beyond their control, but were always willing to lavish wealth on the people they controlled, creating a class of landlords who would take the advantage of the emperors' trust to plunder the land and wealth of the small farmers. For example, under the rule of Emperor Xiao of Ming (1487–1505), the princes and nobles occupied more than 13 percent of the arable land of the empire (Wu 1987, Part 2, 196). In contrast, conditions for the small farmers would inevitably deteriorate, with the prospect of being tenants working for the landlords, or refugees, or bandits fighting landlords

and government.³ As will be seen later, manufacturing and commerce were no refuge for the farmers.

This deterioration in the small peasant economy had serious consequences: first, the state finance would be impaired, for the small farmers constituted the major tax base; second, the national economy would be depressed, for the deterioration suffered by the small farmers affected not only the living conditions of most of the population, but also agricultural production in general: land would be deserted, the water conservancy facilities abandoned, weakening the very foundations of agriculture. Third, social unrest would weigh heavy on the empire, tending to develop into peasant war, ultimately spelling doom for the dynasties.

Hopeful emperors and their patriotic assistants in some dynasties would then try to launch reforms to save their rule, taking the weight off the backs of the small farmers, restricting land annexation and restoring the small peasant economy. However, the reforms seldom worked. For example, Huang Zongxi, a famous Chinese scholar in the seventeenth century, concluded that in Chinese history, although every tax reform in every dynasty aimed to reduce the tax burden on small peasants, it ultimately increased (Huang 1985, Vol. 1, 26–29). Thus reform simply prolonged the death throes of the dynasty and the whole economy. With a severely depressed national economy, the imperial government lost revenue and became paralyzed; the desperate peasants were forced to rise up; the landlords and bourgeois sealed their wallets, and the weak empire fell prey to foreign barbarians. Ultimately the dynasty collapsed, chaos and war returned, until unification was achieved by another ‘Son of Heaven’, a new dynasty established, the small peasant economy restored and the empire’s life cycle renewed. This is the typical agricultural crisis cycle, outlined in Table 7.1.

Every dynasty of the Chinese empire shows such agricultural and governance crisis cycles, as Table 7.2 illustrates.

THE CYCLE OF CRISIS IN MANUFACTURING AND COMMERCE

As mentioned above, Imperial China had always opposed privately owned commerce and manufacturing since development in those sectors would bring mobility to the population and change to the economic structure, while catalyzing concentrations of wealth.

Imperial China had seen three manufacturing systems: state-run, private-run and household-run.⁴ State-run manufacturing had started long before China became an empire, private-run manufacturing coming later. Every dynasty in Imperial China had specific government agencies in charge of managing fabricating production and the artisans. The products of state-run manufacturing fell into two categories: the first mainly served the needs of the state in ceremony, defense, administration and the royal family’s

³ One Minister of Penalty in eleventh-century China found 70 percent to 80 percent of criminals put to death were bandits, and according to his investigation, the bandits normally came from the bankrupted farmers. See Li (1985, 4243).

⁴ See Lv (2005, 38–66) and Zhao and Chen (1991, 249–297).

Table 7.1 The classical pattern of the empire's agricultural crisis cycle

Stages of cycle	Reconstruction	The golden age	Crisis	Reform	Collapse
Situation	<ol style="list-style-type: none"> 1. Establishment of a new dynasty 2. End of chaos and war, start of peace and unification 3. Start of recovery of national economy 4. Start of reconstruction of small peasant economy 	<ol style="list-style-type: none"> 1. Prosperous small peasant economy 2. Full implementation of the principles of Imperial China 3. Apex of the emperor's authority and expansion of the empire 	<ol style="list-style-type: none"> 1. Deterioration in the small farmers' economic conditions. 2. Land annexation and rural usury 3. Rise of landlord economy 4. Deterioration of state finance 	<ol style="list-style-type: none"> 1. Fiscal crisis 2. Depression of the small peasant economy 3. Social unrest 	<ol style="list-style-type: none"> 1. Fiscal crisis 2. Peasant war 3. Foreign Invasion 4. Warlordism 5. Paralyzed emperor and imperial government 6. Overall crisis in the national economy
Policies	<ol style="list-style-type: none"> 1. Fair redistribution of land 2. Tax reduction and other policies encouraging recovery of the small peasant economy 	<ol style="list-style-type: none"> 1. Consolidation of the small peasant economy 2. Expenditure on expansion of the empire 	Normally no effective reaction to the crisis	Reforms aimed at relieving small farmers: new taxation system, restriction on land annexation and usury	<ol style="list-style-type: none"> 1. Old dynasty collapse 2. Competition for the new 'Son of Heaven'

Sources: Ban (1997, 1117–1148), Song (1975, 1341–1364), Toqto'a and Alutu (1977, 4155–4195, 4347–4373), Zhang (1974 [1880], 1877–1913), Zhao (1977, 3479–3563), Ma (1986, 27–67), Li (1985), Huang (2008), Twitchett and Fairbank (1986, Vol. 1, 551–574, 608–626), Twitchett (1979, Vol. 3, Part 1), Twitchett and Fairbank (2009, Vol. 5, Part 1), Twitchett and Fairbank (1998, Vol. 8, Part 2, 417–578), Wu (1987), Cao (1989) and Hou (2005).

consumption; the second comprised state monopoly staples: iron, copper, white alum, liquor, tea and cooking salt, although the range changed slightly between dynasties.

Household-run manufacture was common throughout the history of the empire. 'Men plough and women weave' was a fundamental tenet (Brook 1998, 638–645). The technology was mainly manual, thus the capital input was affordable for small peasants. The products, mainly textiles, were for self-consumption and paying in-kind tax. There was occasional and scattered market exchange of these home-made products.

Private-run manufacturing was established by craftsmen or the merchants. The production was market-oriented and concentrated in urban areas. The empire did not favor its development: it elbowed private manufacturing out of the industries monopolized by the state, and occasionally plundered it. Thus the manufacturers tended either to worm their way into becoming chartered agents of the empire in manufacture and commerce, or to quit the sector once they had earned enough money to be landlords or usurers.

Table 7.2 *Empire's cycle in agriculture*

Stages of Cycle	Reconstruction	The golden age	Crisis	Reform	Collapse
Qin (221–207BC)	Qin, the first dynasty, unified China under a centralized absolute monarchy. Despite its short rule, its small peasant economy cycle started before the unification of China. It established this economy and eliminated large feudal estates during the radical reform of 359–338 BC, expropriating land from the feudal aristocracies and criminals and distributing it to the people according to their military merit or achievement in tillage. Compulsory national military service was introduced. 338–221 BC was the golden age of Qin. It conquered all the other kingdoms in China and established the unified empire in 221 BC. Then, due to the heavy toll the war against Hun took on the farmers, construction of the Great Wall and other works, and insubordination among the nobles of the kingdoms conquered by Qin, the dynasty was overturned by peasant war and rebellion by the nobles of former kingdoms.				
Former Han (202 BC – AD 24)	<p>1. Economic recovery after the peasant war.</p> <p>2. Restoration of the small peasant economy. During this time farmers were not overexploited by the landlords and usurers</p> <p>3. The 'Rule of Emperor Wen and Emperor Jing' (180–141 BC), successful recovery of the national economy.</p>	<p>1. 'Flourishing Age of Emperor Wu' (141–87 BC)</p> <p>2. Domestic supremacy of the emperor over all other vassal princes: suppressing the rebellion of seven vassal states and cutting down the size and number of such states.</p> <p>3. Heavy expenditure on Huns and southern barbarians.</p>	<p>1. Rampant land annexation and rural usury</p> <p>2. The rise of landlord economy and worsening conditions for small farmers</p>	<p>1. Polarization between the landlord and small farmers</p> <p>2. Social unrest</p> <p>3. Wang Mang's coup d'état; the end of Former Han</p> <p>4. The regime of Xin Dynasty (AD 8–23)</p> <p>5. Peasant Wars</p>	
	<p>1. Ensuring peace and security</p> <p>2. Tax reduction on agriculture</p> <p>3. Rewarding those farmers who were diligent in production</p> <p>4. Distributing land to refugees and veterans</p> <p>5. Forcing the large landlords to leave their property and emigrate to the region near the capital</p>	<p>Forcing the large landlords to guard royal mausoleum and dividing their land, otherwise, no effective measurements in protecting the small peasant economy</p>	<p>1. The suggestion was made to restrict land annexation in the age of Emperor Wu, but was not carried out.</p> <p>2. The attempt to set a lower limit to the land one household could occupy and equalize the distribution of land in Emperor Ai's regime (7–1 BC), failed.</p>	<p>The usurper of Former Han, Wang Mang, established the Xin Dynasty. Wang Mang started the reform trying to realize small peasant economy and equal distribution of land, nationalizing all the land in the empire, distributing it fairly to the farmers, and forbidding the trade in land. But he failed.</p>	

Later Han (AD 25–220)	<p>Reunification and economic recovery</p> <ol style="list-style-type: none"> 1. 'Rule of Zhang and Ming' (AD 57–88) 2. Economic prosperity 3. Expedition against Huns (AD 73) 4. Occupation of the Western Regions in inland north-west, now Sinkiang region (AD 60) 	<ol style="list-style-type: none"> 1. The rise of the 'quaternities': i.e. combinations of landlords, bureaucrats, businessmen and usurers 2. Chaos in politics, the rise of royal clans, and local warlords 	<p>Peasant war (AD 184–185) followed by the conflict among warlords.</p>
Three Kingdoms to the Northern and Southern Dynasties (AD 220–589)	<ol style="list-style-type: none"> 1. Granting lands to refugees 2. Measuring the land to revise tax system 	<ol style="list-style-type: none"> 1. Tax reduction 2. Granting lands to deprived peasants 	<p>No effective reform</p>
Sui (AD 581–618)	<ol style="list-style-type: none"> 1. Reunification of China. 2. Recovery of the national economy 3. 'Age of Kai Huang' (AD 589–600) 	<p>More than 300 years of peasant wars, ethnic conflicts, regime changes, warlord conflicts. No unified or durable dynasty. More than 32 independent regimes established in China during this period. At least five nomadic ethnic groups settled in China.</p> <p>Prolonged chaos created vast no man's land, which was nationalized and distributed to farmers and refugees by the state to encourage the small peasant economy. Thus the 'Equal Land Allocation System' emerged. Land could be inherited but sale and purchase were restricted. Those receiving land were liable to taxes, servitude and military service. This system lasted from the late fifth to late eighth century.</p>	<p>The second, also the last, emperor of Sui was too ambitious and craved more glory than the economy could afford, lavishing resources on the new capital city, the Grand Canal, and invasion of Korea (three times). The unsustainable burden of taxes and servitude finally drove people to rebel. The peasant war started; the Sui dynasty collapsed.</p>
Tang (AD 618–907)	<ol style="list-style-type: none"> 1. Reunification of the empire 2. The recovery of national economy: 'Age of Zhen Guan' (AD 627–649) 	<ol style="list-style-type: none"> 1. Expedition on Turks and other Northwestern Barbarians 2. The emperor of Tang became the 'Heavenly Khan', supreme ruler, of Northern and Central Asian steppe region 3. Surrender of regimes in Manchuria, Tibet, and Korea as vassal states 	<ol style="list-style-type: none"> 1. The rebellion suppressed, the country was reunified 2. Reorganization of the country after the collapse of the 'Equal Land Allocation System' 3. The rise of local separatism and warlords <p>Polarization between landlords and peasants, and heavy tax burden caused the peasant war (AD 878–884), followed by local separatism. The dynasty was overturned by warlords</p>

Table 7.2 (continued)

Stages of Cycle	Reconstruction	The golden age	Crisis	Reform	Collapse
		<p>4. The 'Kai Yuan Flourishing Age' (AD 713–741)</p> <p>Inheriting and consolidating previous good governance under the rule of Empress Wu (AD 684–712), and the early stage (AD 713–720) of Emperor Xuan</p>	<p>4. The warlords' An-Shi Rebellion (AD 755–763)</p>	<p>The reforms of Emperor Dezong (AD 779–781), and Emperor Xianzong (AD 805–820), including the new taxation system: two tax system</p>	
Five Dynasties and Ten Kingdoms (AD 907–979)	<p>1. The national spread and consolidation of 'Equal Land Allocation System', constituting the basis of the economy, fiscal system, and national defense</p> <p>2. Promoting recovery of agriculture</p>	<p>Prolonged chaos again, with warlord conflicts. At least 15 independent regimes established. The economy in northern China severely hit by wars, southern China comparatively peaceful and more prosperous than the north.</p>			
Northern Song (AD 960–1279)	<p>1. Reunification of the central and southern part of China, while the northern part was occupied by Khitan.</p> <p>2. Rule of Emperor Taizu (AD 960–976)</p>	<p>1. Unsuccessful expedition on Khitan.</p> <p>2. The most prosperous time in Northern Song (AD 976–1022)</p>	<p>1. fiscal crisis due to war against Khitan and Tangut</p> <p>2. Deterioration of small farmers' economic conditions</p> <p>3. Rise of landlord economy</p>	<p>The regime of Emperor Shenzong, eager to solve economic and fiscal problems</p>	<p>1. The peasant wars</p> <p>2. Fiscal crisis and corruption in the regime of Emperor Huizong (AD 1100–1126).</p> <p>3. Invasion from Jurchen</p>

Promoting agricultural recovery through tax reduction, subsidies, and urging the local government to promote production.	1. Consolidating and promoting the small farmer economy 2. A ceiling set to the rural usury interest rate, and ban on using arable lands and farm animals to pay back debts. Further limit to land occupation			Wang Anshi's reform (AD 1069–1074), relieving small farmers from rural usury, and promoting growth their economy
Southern Song (AD 1127–1279)	1. Reconstruction of dynasty in southern China 2. Recovery of national economy ruined by the invasion	1. The regime of Emperor Xiaozong (AD 1162–1189) 2. Expedition on Jurchen (AD 1163)	1. Fiscal Crisis 2. Rise of landlord economy and worsening conditions for small farmers	Reform under Emperor Lizong (AD 1224–1264) 1. The rampant 'quaternities' 2. Invasion of Mongolia
	1. promote and subsidizing agriculture production 2. Redistribute the deserted land to the farmers and refugees	Continue the policy enhancing small farmers: tax reduction, building water conservancy facilities		The state set maximum limit to the land one household could occupy, purchasing excess land
Yuan (AD 1271–1368)	Yuan was established by Genghis Khan's Mongolian descendants. Emperors of Yuan made no attempt to base empire on Confucianism. Nobles' land closure, serfdom, and racial hierarchy established in China. Despite agriculture promotion policies, the small peasant economy remained unprotected, resulting in the peasant war and collapse of dynasty.			
Ming (AD 1368–1644)	1. Reunification of China 2. Recovery of small peasant economy 3. Rule of Emperor Hongwu (AD 1368–1398)	1. 'Age of Yong Le' (AD 1402–1424) 2. Five expeditions on Mongolia 3. Control of Manchuria, Korea, Vietnam, and the West Regions regained 4. Seven major expeditions on the Pacific and Indian Oceans	1. Expansion of landlord economy and the 'quaternities' 2. Fiscal crisis 'New Deal in Wan Li Era' (AD 1573–1582): reforming fiscal and tax systems	1. Rampant landlords and the 'quaternities' 2. Heavy tax burden on small farmers 3. Peasant war (AD 1628–1644) 4. Manchu's invasion (AD 1616–1644)

Table 7.2 (continued)

Stages of Cycle	Reconstruction	The golden age	Crisis	Reform	Collapse
	Emperor Hongwu's economic policies sought to form a small peasant economy relying on tillage and domestic manufacture, distributing land to farmers and refugees, reducing taxation on small farmers, subsidizing small farmers with means of production, organizing land reclamation, and punishing the large landlords and usurers	Consolidating small-scale peasant economy			
Qing (AD 1644–1912)	<ol style="list-style-type: none"> 1. Conquest of Manchu pacified the peasant war and the rebellious forces of previous dynasties 2. Recovery of national economy and small peasant economy <ol style="list-style-type: none"> 1. Detention of Manchu nobles band 2. Tax on peasant's newly reclaimed land cancelled 3. Tax reduction 4. Tax system reformed, poll tax cancelled 5. Peasants' occupation of land deserted in wartime approved 	'Kang-Qian Flourishing Age' (AD 1681–1796)	<ol style="list-style-type: none"> 1. Rise of landlord economy and the 'quaternities' 2. Fiscal crisis caused by overexpansion in war and luxury 	<p>British penetration of China in 1840 changed the cycle of the Chinese empire. However, oppression of farmers led, in AD 1851–1864, to peasant war on unprecedented scale; it was suppressed but accelerated the collapse of the Qing dynasty</p>	

Sources: Ban (1997, 1117–1148), Song (1975, 1341–1364), Toqto'a and Alutu (1977, 4155–4195, 4347–4373), Zhang (1974 [1880], 1877–1913), Zhao (1977, 3479–3563), Ma (1986, 27–67), Li (1985), Huang (2008), Sadao (1986, 551–574), Ebrey (1986, 608–626), Twitchett (1979, Vol. 3, Part 1), Twitchett and Smith (2009, Vol. 5, Part 1), Hejira (1998, 417–578), Wu (1987), Cao (1989) and Hou (2005).

For commerce, Imperial China had two levels, state-run and private (Zhang 1989, 15–18). Before the imperial age state-run commerce was conducted by royal slaves and servants. Subsequently it came to be conducted by chartered businessmen and the commercial agents representing the empire. Much like state-run manufacturing, besides satisfying the need of the empire, it was in charge of the state monopolies including iron, tea, liquor and cooking salt. The purpose of state-run commerce was normally to boost fiscal income, but occasionally it extended to controlling the commerce with large-scale participation in trade in practically all kinds of goods. Such controls served for stabilizing market prices, or in some cases for competing with private businessmen for market profit.

As for private commerce, even before the imperial age the organizers of Imperial China had noticed the attractive profitability of the commerce sector: ‘Talking of accumulating wealth, manufacture is better than agriculture, trade is better than manufacture’ (Sima 1973, 3274). And they were worried that unrestricted access to the sector might shake the foundations of the national economy and the social order of a centralized, unified empire (Ban 1997, 1127–1136), consequently subjecting it to plunder and oppression. The idea was to make the commerce sector as unattractive as possible to farmers. In Imperial China, the private manufacturing sector was affiliated to the private commerce sector (Zhu 1988, 55–60), because private artisans relied on businessmen to sell their products and to provide raw materials and financial support. Thus the destinies of the private commerce sector and manufacturing sectors were bound together.

We have an example of the rough treatment of businessmen at the start of the Former Han Dynasty (202 BC to AD 8), when the emperor reduced the living standards of private businessmen and forbade them and their offspring to join the government (Ban 1997, 1153). Similar policies came in at the start of the Tang (AD 618–907) and Ming dynasties. Apart from making their lives uncomfortable, however, there was no substantial policy in the economic field to restrict private commerce and manufacturing, which could develop freely: the empire would cancel the state monopoly on certain goods and industries in favor of private businessmen; the empire would not subject private commerce and manufacturing to predatory policies. A *laissez-faire* attitude prevailed because: firstly, the new dynasty wanted to gain the support of private businessmen by showing its superiority over the previous, predatory dynasty, showing benevolence to all, and no interest in competing with private sectors for economic profit; secondly, this *laissez-faire* attitude could help the recovery of the national economy, giving people a rest without obstructing its natural growth path; and thirdly, at the beginning of a new dynasty, after chaos and war, the private commercial sectors were normally in depression, so they could not be regarded as a threat to or prey of the empire. This is the stage of recovery of private manufacture and commerce.

The *laissez-faire* attitude of the empire would open the way to the golden age of private commerce and manufacture: influential private businessmen or clans or business groups would accumulate abundant wealth through their business; the successful businessmen were willing to invest their wealth back in the commerce sector to expand their commercial capital; the private businessmen were not bothered by government restriction and plunder. However, firstly, when the ordinary taxes no longer sufficed, the empire needed some other source of fiscal income, and the prosperous private businessmen with their considerable wealth and profitable industries became an ideal financial resource for the emperor. The empire might then exploit state commerce and manufacturing to compete

with private businessmen for profit, or monopolize certain industries, elbow private businessmen out and seek monopoly profits or, in some extreme cases, plunder the businessmen's wealth with predatory taxation. For example, during the rule of Emperor Wu of Han (140–87 BC), the government imposed a predatory property tax on private businessmen and artisans, any concealment of property leading to confiscation of it all. Thus the government acquired 'billions of the wealth from the people', and was 'fiscally abundant', but 'nearly all of the large and medium businessmen were bankrupted' (Ban 1997, 1175).

Secondly, businessmen accumulating great wealth or dominating the staple commodity markets, or indeed succeeding in controlling markets and prices, would trigger the vigilance of the empire. The empire started to think that some extremely important, highly profitable industries should not be conducted by private businessmen, and control over the market would be restored back to the state, which would also go on to monopolize some industries and use its commercial power to gain control over the market, for example nationalizing the iron and salt industries under the Former Han Dynasty (Loewe, 1986, 162). Moreover, in the late eleventh century, the empire believed that the power of controlling the flow of the goods and setting prices should be taken from big businessmen back to the state, so the empire used its fiscal deposit as commercial capital to compete with them in the commercial sector (Li 1985, 5622–5623).

Besides, the polarization between the rich businessmen who should be the lowest class of the society and the poor farmers who should be the best-treated citizens in the empire came in for criticism from the Chinese exponents of egalitarianism. In general, the empire started to turn its policies on private commerce and manufacture from *laissez-faire* to restrictive and predatory.

The empire's policies hitting at private manufacturing and commerce went essentially thus. Firstly, the state would monopolize the production and sale of certain goods which were profitable and important in the daily lives of the people – iron, salt, tea, liquor, copper, alums, and so on – so that the state could elbow the private sector out of certain industries and take advantage of the monopoly to fill the state coffers. Secondly, the state would directly participate in the commercial sector, and use the resources of the empire to compete with private businessmen for the profit. Thirdly, the state would impose predatory taxes on private businessmen and artisans, such as property taxes, tolls and compulsory tributes (especially for the artisans).

As the result of the empire's policies, firstly, the manufacturing and commerce sector no longer constituted a profitable and safe place for investment; businessmen simply could not risk all their capital in the commercial sector. The wealth acquired through manufacturing and commerce needed safer refuge. In Imperial China, the most popular refuge was land (Fairbank 1983, 49). 'The wealth should be acquired through manufacture and commerce, but must be transferred into land and agriculture to keep it safe and solid' (Sima 1973, 3281), as Chinese businessmen had understood since the early stage of the First Empire. The other popular refuge was usury, which created a distance between owners of wealth and direct commercial activities. In Imperial China, manufacturing and commerce were not regarded as permanent careers, but temporary means to make money quickly. Secondly, along with end of investment in manufacturing and commerce, the entrepreneurship and the enthusiasm of the Chinese people were also destroyed. For example, since Emperor Wu of Han imposed the predatory property tax on businessmen,

‘people took to spending on good food and good clothes, no longer willing to save for future investment’ (Ban 1997, 1170). By contrast, at the beginning of the First Empire, when the state took the *laissez-faire* attitude, ‘big businessmen were doing business all over the country’ (Sima 1973, 3261). Thirdly, in these circumstances, if the businessmen still wanted to conduct business, they had to collude with the imperial government, working for the emperor and his government as commercial agents or chartered businessmen. Business was no longer a matter of entrepreneurship, but of pursuing the rent generated by the monopoly market position; as John Fairbank put it: ‘The tradition in China has been not to build a better mousetrap but to get the official mouse monopoly’ (Fairbank 1983, 47). Therefore, besides land and usury, another popular outlet for businessmen’s wealth lay in buying a government position.⁵ In this way, when all of the outlets for the wealthy businessmen in the empire combined, a special identity came into being: the ‘quaternity’, a mixture of landlords, bureaucrats, usurers and businessmen (Zhang 1989, 15–16).

Now, all too clearly, in Imperial China the commerce and manufacturing sector could not shelter the small farmers whose economic situations had so greatly worsened. The population originally active in the commerce and manufacturing sector, elbowed out by the state and seeking refuge elsewhere, could hardly afford an influx of bankrupted small farmers. Besides, as the small farmers’ economic conditions deteriorated, the state fiscal situation started doing likewise, for the small farmers constituted the empire’s major tax base. With the declining fiscal situation the state sought control over the manufacturing and commerce sector, plundering private businessmen, and so driving wealth back to land and usury. Thus the landlord economy and usury capital would grow, further aggravating conditions for the small farmers, and the crisis of the empire’s national economy would become yet more severe.

Thanks to the ‘efforts’ of the empire, the private entrepreneurs in commerce and manufacturing were successfully eliminated. Left in the market were the small businessmen and small artisans, who were no better off than the small peasants, and the quaternities, who monopolized the market and relied on the government. So the empire came to take full control over manufacturing and commerce, but capital accumulation in the commercial sector and entrepreneurship were also totally destroyed. This situation would normally last until the collapse of a dynasty. Eventually, after chaos and war between two dynasties, with the rise of a new ‘Son of the Heaven’, the cycle in manufacturing and trade would start once again. Such is the classical crisis cycle in manufacturing and commerce. It is summarized in Table 7.3. This crisis cycle could be seen in every dynasty of the Chinese empire, as Table 7.4 shows.

CONCLUSIONS

In conclusion, from the cycle of crisis in agriculture, manufacturing and commerce in Imperial China, I think one can appreciate the internal reasons why Imperial China was caught up with by the Western world, and failed to generate modern industry.

⁵ See Wu (2005, Vol. 2, 687–688) and Wu (2005, Vol. 3, 746–747).

Table 7.3 The classical cycle in manufacture and trade

Stages of cycle	Recovery	The golden age	Restriction	Depression and collapse
Situation	<ol style="list-style-type: none"> 1. Establishment of a new dynasty 2. Recovery of national economy 	<ol style="list-style-type: none"> 1. Prosperity in manufacturing and commerce 2. Influential businessmen or clans or business groups 	<ol style="list-style-type: none"> 1. Fiscal crisis in the empire 2. Polarization between poor and rich 3. Overexpansion of commercial capital 	<ol style="list-style-type: none"> 1. Extinction of big businessmen 2. Businessmen transfer wealth into land and usury for refuge 3. Businessmen collude with the government in pursuit of rent 4. The rise of the 'quaternity', the mixture of bureaucrats, businessmen, usurers and landlords
Policies	<ol style="list-style-type: none"> 1. Laissez-faire or neutral attitude towards private manufacture and commerce 2. Cancelling the state-monopolized industries and goods, and the predatory taxation on private businessmen 		<ol style="list-style-type: none"> 1. Government monopolizes the production and sale of crucial industries and goods 2. Government only allows the chartered enterprises to do business in certain fields 3. State participates in and controls trade 	<p>The flow of commercial wealth:</p> <ol style="list-style-type: none"> 1. Land purchase 2. Usury capital 3. Buying government positions 4. Conspicuous consumption 5. Plundered by the government

Sources: Sima (1973, 3253–3283), Ban (1997, 1149–1188), Ma (1986, 143–213), Li (1985), Toqto'a and Alutu (1977, 4403–4566), Song (1975, 1377–1392), Zhang (1974 [1880], 1931–1999), Zhao (1977, 3603–3672), Twitchett and Fairbank (1986, Vol. 1, 20–290, 574–626), Twitchett (1979, Vol. 3, Part 1), Twitchett and Fairbank (2009, Vol. 5, Part 1), Twitchett and Fairbank (1998, Vol. 8, Part 2, 670–707), Wu (2005, Vol. 1, Vol. 2, Vol. 3), Wu (2014), Tong (2005), Zhu (1988) and Zhang (1989).

Table 7.4 *Empire's cycle in manufacture and trade*

Stages of cycle	Recovery	The golden age	Restriction	Depression and Collapse
Qin (221–206 BC)	Qin restricted private manufacturing and commerce in the 359–338 BC reform. Since then, Qin regarded private businessmen as parasites of the country. Qin had never been tolerant of the private businessmen: the state monopolized the trade of grain, clothes, farm animals, pottery, iron and salt; the state nationalized all the production and trade in mining; the increase in the number of private businessmen was under the control of the state; and heavy tax was imposed on the private businessmen.			
Former Han (202 BC – AD 24)	<ol style="list-style-type: none"> 1. Reunification of the empire. 2. Recovery of the national economy. 	<ol style="list-style-type: none"> 1. 'The Rule of Emperor Wen and Emperor Jing' (180–141 BC) and early stage of the rule of Emperor Wu (141–120 BC) was the golden age for private businessmen. 2. Many influential and prosperous private businessmen. Historical records listed 21 successful businessmen and business clans, mainly conducting production and sale of iron, metallurgy, cooking salt, grain, also active in transportation and retailing industry. 	<ol style="list-style-type: none"> 1. Fiscal crisis. 2. Expansion of commercial and manufacturing capital. 	Disappearance of successful private businessmen and artisans, rise of the mixture of landlords, bureaucrats, usurers and businessmen.
	<ol style="list-style-type: none"> 1. Discriminating against private businessmen socially and politically, but not economically. 2. All state monopolies and nationalization cancelled in all fields. Private businessmen were allowed to participate in the production of and trade in iron, salt, copper, and other important industries. 	<p>Sang Hongyang's reform (started from 120 BC)</p> <ol style="list-style-type: none"> 1. Nationalization of production and sale of iron and salt. 2. Government monopolizes the sale of liquor. 3. Takes full control of the commercial market and engages in trade in all kinds of goods, aiming at stabilizing the market and increasing fiscal income. 4. Imposes predatory property tax on private businessmen and artisans; anyone concealing the extent of property would have it confiscated. 		

Table 7.4 (continued)

Stages of cycle	Recovery	The golden age	Restriction	Depression and Collapse
Later Han (AD 24–220)	Later Han inherited the state monopoly in iron and salt. But it also inherited the ‘quaternities’. Therefore, although Later Han had lighter restrictions on manufacture and commerce, these sectors were monopolized by the quaternities from the start of the dynasty. As a result, those powerful local quaternities evolved into local warlords, which led to the collapse of the dynasty.			
Three Kingdom to the Northern and Southern Dynasties (AD 220–589)	Long-lasting chaos ruined manufacturing and commerce in the empire. The chaos disrupted commercial activities and ruined the manufacture market, and with it confidence in the currency. The economy degenerated into a closed and self-sufficient manorial economy. The cities were destroyed. Urbanization regressed.			
Sui (AD 581–618)	Reunification of the empire, restoration of peace and recovery of the national economy.		Heavy tax burden on private businessmen and artisans, due to construction of the new capital city, excavation of the Great Canal, and expeditions.	
	<ol style="list-style-type: none"> 1. Reunification of currency. 2. State monopoly on metal, salt and liquor abolished. 3. Tax on private manufacturing and commerce reduced. 			
Tang (AD 618–907)	<ol style="list-style-type: none"> 1. Reunification of empire. 2. Recovery of national economy. 	<ol style="list-style-type: none"> 1. Prosperity of the private commerce and manufacture sector (AD 627–755). 2. The capital city of Tang as international commerce center. 3. Silk Road prosperity. 	<ol style="list-style-type: none"> 1. Fiscal crisis caused by the civil war and the collapse of the Equal Land Allocation System. 2. Prosperous and unrestricted private commerce and manufacturing. 	<ol style="list-style-type: none"> 1. Depression in commerce and manufacture and the rise of the quaternities. 2. Due to separatism, local warlords controlled local commerce and manufacture.

1. Discrimination of private businessmen socially and politically, but not economically.
2. All state monopolies and nationalization in all fields abolished.
3. Tax on private businessmen and artisans reduced.

1. Liu Yan, the Minister of Finance (AD 760–779), imposes chartered business system on salt industry and heavy tax on salt.
 2. In Emperor Dezong's regime (AD 779–805), nationalizes the production and sale of salt, iron, tea, minerals and liquor.
 3. Predatory domestic tariff and property tax imposed on private businessmen and artisans
- Commercial wealth flew to:
1. land purchase (most important);
 2. usury;
 3. conspicuous consumption and storage;
 4. commerce and manufacture for capital accumulation.

Five Dynasties and Ten Kingdoms (AD 907–960)

In this chaotic age, war occurred mainly in northern China and destroyed manufacturing and trade there. However, in southern China, the warlords maintained lasting peace with one another and promoted the development of trade and manufacturing; for example, the midstream region of the Yangtze River became the international tea trade center; the southeast coastline became the base of ship-building and silk production.

1. Reunification of the country and restoration of peace.
 2. Recovery of the national economy.
- Prosperity of private commerce and manufacturing (AD 976–1022).
1. Rise of the mixture of bureaucrats, usurers, landlords, and businessmen.
 2. Government competed with private businessmen for market profit.

Northern Song (AD 960–1127)

Table 7.4 (continued)

Stages of cycle	Recovery	The golden age	Restriction	Depression and Collapse
	<ol style="list-style-type: none"> 1. Tax on private commerce and manufacture reduced. 2. Private businessmen allowed to participate in the state monopolized fields. 		<ol style="list-style-type: none"> 1. Nationalization and chartered business in tea, iron, liquor and alums extended. 2. Heavy tax imposed on private businessmen. 3. In Wang Anshi's reform, the state directly participated in market trade and fully controlled purchase and sale, and price setting. 	<p>Commercial wealth flew to:</p> <ol style="list-style-type: none"> 1. land purchase (most common); 2. usury; 3. the government, to buy government positions; 4. commercial and manufacturing sector.
Southern Song (AD 1127–1279)	Southern Song inherited the restriction on commerce and manufacture of Northern Song and made no concessions on the commercial sectors. On the contrary, it imposed heavier taxes on private businessmen, and enlarged state monopoly in tea, liquor, salt and alums. The 'quaternities' prevailed.			
Yuan (AD 1279–1368)	Yuan dynasty severely restricted participation in trade and manufacturing by the former citizens of the Song dynasty. However, the Yuan government, from the royal clans to the bureaucrats, actively conducted business and usury in the market for profit through the representation of their commercial agents. The Yuan government monopolized the tea, liquor, iron, and salt. The monopoly of the 'quaternities' in the market, and government's competition with private businessmen in market profit, crashed private manufacturing and commerce.			
Ming (AD 1368–1644)	<ol style="list-style-type: none"> 1. Unification of empire. 2. Economic recovery. 	<ol style="list-style-type: none"> 1. Prosperity and the manufacturing and commerce of Ming (AD 1403–1456). 2. The rise of famous business groups: Jin Merchants, Hui Merchants, and so on. 	<p>Fiscal crisis caused by military expenditure and emperors' luxuries.</p>	<ol style="list-style-type: none"> 1. Rise of the 'quaternities' 2. Rebellion of the businessmen and artisans in urban areas in late Ming.

1. State allowed private businessmen to participate in monopolized fields such as tea, liquor, iron and salt.	1. Private businessmen could not conduct international trade (as from AD 1394).	The commercial wealth flew to
2. Tax on commerce and manufacturing reduced.	2. Predatory tax and domestic tariff imposed on private businessmen and predatory tribute collection on private artisans, especially under the regime of Emperor Shenzong (AD 1582–1620).	1. land purchase; 2. usury; 3. conspicuous consumption; 4. buying government positions; 5. commerce and manufacturing.

Qing (AD 1644–1912)

Qing's cycle in manufacture and commerce was slightly different from the previous dynasties. In the early Qing stage (AD 1644–1736), the government maintained its restrictive attitude towards private manufacture and commerce, imposed heavy taxation on businessmen, forbade private participation in mining and international trade, and set a ceiling on the number of looms a silk workshop could have. In the middle stage (AD 1736–1799), the restriction was abolished, and commerce and manufacture were promoted, enjoying prosperity. However, the restrictive policy was restored in the late stage (AD 1799–1840), and finally the cycle was interrupted by the Opium War.

Sources: Sima (1973, 3253–3283), Ban (1997, 1149–1188), Ma (1986, 143–213), Li (1985), Toqto'a and Alutu (1977, 4403–4566), Song (1975, 1377–1392), Zhang (1974 [1880], 1931–1999), Zhao (1977, 3603–3672), Bodde (1986, 20–102), Loewe (1986, 103–222), Bielenstein (1986, 223–290), Sadao (1986, 574–607), Ebrey (1986, 608–626), Twitchett (1979, Vol. 3, Part 1), Twitchett and Smith (2009, Vol. 5, Part 1), Brook (1998, 670–707), Wu (2005, Vol. 1, Vol. 2, Vol. 3), Wu (2014), Tong (2005), Zhu (1988) and Zhang (1989).

In the agricultural sector, the empire confined itself to the small peasant economy, and tried to consolidate this system. The empire never considered that the growth of manufacture and commerce would absorb the bankrupted small farmers driven out of agriculture due to the rise of the landlord economy. Nor had it imagined that exchange between villages and cities, between the agricultural population and the manufacturing and trading population, could provide a constant impulse for prosperity in agriculture. The empire never dreamt of creating any refuge for the small farmers who could not survive in agriculture. Thus, with the decline of the small peasant economy and the rise of the landlords, the empire had no countermeasures to help the small farmers adapt to this situation and find other livelihoods. The only thing the empire could do was to try to delay the progress of landlords, but still the farmers found no refuge from the exploitation of landlords and usurers. Survival lay only in tillage. The city was there, but it was monopolized by the big businessmen colluding with the government. The small businessmen and artisans seemed no better off than the small farmers. Ostensibly the government sought to restrict exploitation by the landlords and rural usurers, but conditions always grew worse for the small farmers. As a result, the farmers had no choice but to put up with increasing rents, interest rates and taxes. And when prospects grew utterly bleak, the farmers had no choice but to join in the peasant wars. Thus agricultural production invariably suffered in every cycle as constant development and growth were impossible, whereas the landlords, relying on rent collection and usury, enjoyed a permanent golden age. Without constant growth and improvement in agricultural production, no modern industry could ever be generated.

In manufacturing and commerce, the empire had never seen the positive sides of these two sectors, apart from their high profitability. Therefore, the empire ever sought to plunder all the private businessmen's earnings in these sectors, elbowing them out and monopolizing the profits, thereby making of these sectors a precarious and risky, monopolized market. Businessmen skilled in making improvements and recapitalizing their businesses – the potential great hope of modern industry – all chose to transfer their wealth to land investment and usury, which had nothing to do with the birth of modern industry. The risk of capital accumulation in manufacturing and commerce was too high; the primitive system had to be maintained in the empire. Besides, for those who still did business in the market, facing the most powerful and most privileged monopolist – namely, the empire – any entrepreneurship, innovation or technological improvement became secondary. The top priority in acquiring profit lay in pursuing the rent generated by the empire's position on the market. In this circumstance, a propensity for collusion and establishing relations with the imperial government, as well as bribery and corruption, was key to becoming a successful businessman. In spite of important Chinese inventions – from movable type to gunpowder – Imperial China was not able to organizationally harness science and entrepreneurship into a path of permanent growth.

One fundamental reason was that the Chinese Empire was not organized on the basis of a dynamic view of the economy or a synergic approach to the relations between different sectors. Another important reason was the lack of diversity: as opposed to Europe where a large number of independent states competed vigorously in war, prestige, science and luxuries, China's organizational unity discouraged trial and error and irreversible change. In short, Imperial China and continued economic growth proved incompatible. The small farmer economy had to prevail at all costs; any dynamic factor was to be

controlled. No deviation from the 'ideal' state of affairs was tolerated. And yet control over the dynamic factors and correction of deviations eventually proved only superficial countermeasures, unable to halt the pace of change in the economy. As a result, the road led inevitably to ruin, and then, once again, a new start.

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8. Islam and capitalism: military routs, not formal institutions

Ali Kadri

Islamic history abounds with merchant trade, and major Islamic cities flourish or decline by the rhythm of long-distance trade (Amin 1976). Islamic free-trade precepts derive their legitimacy from religious tenets. A *hadith* (a saying of the Prophet) acknowledges that profits are nine-tenths commerce and one-tenth other.¹ The freedom for merchants to travel, set prices and exchange with few constraints are central to many schools of Sharia. The oft-debated problematic is that even though Islam did not inhibit the development of commerce, the Muslim world lagged behind Europe in establishing capitalist production relations.² Keeping in mind that the map of Europe keeps changing and that history is not a sports race with a beginning and an end, this chapter revisits certain methodological points that may contribute to the better understanding of a rather thorny subject. The central point of my argument is that European conquests hold primacy in explaining the antecedent rise of capitalist relations in Europe over differences in forms of social organization between European and Eastern modes of production. Imperialist conquests, beginning prior to the onset of capitalist relations circa the sixteenth century, and direct plundering increased the wealth of European merchant capital, limited the expansion of Eastern merchants and situated the inexorable birth of capitalist production relations on the European continent (Marx 1867; Emmanuel 1972).

In a heterogeneous, self-differentiating and interrelated world, the issue of whether Islam, and the East more generally, have failed in comparison to Europe is a misplaced problematic. European capital through its colonial and class linkages extends to the East. The East through its labour, raw materials and underdevelopment by colonial diktat reaches the West. The lines of demarcation that set real concepts apart from hallucinatory forms of thought are the class lines that crisscross national boundaries. Where the space that defines an entity vis-à-vis another ends, is where the ideological inclination begins. So when Bernard Lewis posits that Islam has become poor, weak and ignorant, Michael Neumann responds with relevant data showing that poverty and underdevelopment are not exclusive characteristics of the Muslim world, but are shared across cultures (Neumann 2003). With two world wars and several other wars to its credit in the twentieth century, not least including unjustifiable poverty levels in contrast to immense wealth, Christendom carries more guilt on its conscience (Neumann 2003). From its onset on the world stage, the crisis of capitalism, its genocide of the natives and slavery, has eclipsed its progressive moments. This chapter is not about value-judging historical

¹ My interpretation of the chapter on the etiquette of commerce, at: <http://www.mezan.net/books/man-layahdraho/fakeeh3/html/ara/books/faqih/faqih-3/a62.html>.

² Given that the object of research is the method rather than historicity, at this level of generalization I will be using 'Islamic world' and 'Islam' interchangeably, referring broadly to areas where Islam has been the dominant religion.

development by selective comparisons. It is about reading the onset of capitalist social relations, critiquing the fetishism attendant thereupon and the endogeneity of technology and violence akin to their progress. There is a tremendous amount of material related to this topic. In the main, this chapter builds on the concept of historical surplus value (Abdel-Malek 1981) and is informed by three principal texts:

1. Maxime Rodinson, *Islam and Capitalism*, first published 1966.
2. Hussein Mroueh, *Materialist Tendencies in Islamic Philosophy*, Volumes 1–3 in Arabic, first published 1978.
3. Suheil Taqoush, *Historiography of Islamic History*, Volumes 1–15 in Arabic, completed 2002.

DEVELOPMENT IN CONTEXT

More so than any other discipline, the study of development is blatantly ideological. For the mainstream, development is said to have arisen as a subdiscipline of economics because it inherited the wartime optimism about the world-changing potential and the belief in economics as a science (Toye 2012). For the heterodox school, development, defined as the improvement in the living conditions that the masses obtain through class or national liberation struggles, is the study of the class relationships that spawn progress or the opposite thereof. Prior to the mid-twentieth century, the study of development was known as the economics of the colonies. As fewer and fewer colonies remained in the grip of Western empires, colonial economics assumed the name ‘development economics’. When the Cold War peaked, development studies reflected the political polarization between the two opposing camps. The discussion oscillated between equality of condition – the Soviet model, and equality of opportunity – the United States (US) model; or the debate between the sack of wheat and the voting booth, as Bertrand Russell puts it. The debate would deliver the treatise on all-round development on the Soviet and non-aligned movement side, and the choice theoretic framework on the US side. Social-choice welfare, in its individualistic-probabilistic approach bereft of historical necessity, overlooks the objective and impersonal forces of history that leave the majority without choices. Neglecting necessity as the mediation of simultaneously concrete and coincidental social flux, manifest in the phenomenon of the choice-less majority, and assembling human development indices that vary with convention, adhered to conservative ideological proclivities. Abstract, as opposed to social individualism, elevates the model of emulating personal lifestyle consumerism into a countrywide development imitation by formally demonstrating that the wealth of the few may be similarly made available to the whole, if the latter follows the way of the free market. So far, the free market way has enslaved billions, especially in the Muslim world, and because its ideological bent obscures the subject of history and the social contradiction behind the laws of development, it is a continuation of the hate literature lurking in the modern European past.

With the collapse of the Soviet Union, the triumph of the capitalist model was sealed as science. Empiricism parading as theory de-historicized development. The quantification of social variables without regard to their content had clouded over surplus transfers from colonies to the Empire in the past. A whole history of Third World and

indigenous development and a wealth of knowledge that developing societies experienced in the past was discarded and replaced with a European value system rooted in racial or cultural superiority. In the most recent line of argument, the Islamic world's developmental descent was ascribed to static institutions incapable of incubating progress. These formalized institutions, abstracted from conditions in the present and projected upon the past, not only transcend history but also inject a dose of inferiority into 'other' cultures for not being dynamic and Christian like the West. In the same manner that the modern economy was subjected to supply-side economics, history was subjected to supply-side historiography. In the former case, for instance, the modern Islamic world did not provide sufficient tax exemptions for private investment to thrive, and in the latter case, the ancient Islamic world did not set clear private-property rules – un-Islamic rules (Christian-like) – for capitalism to dawn. History was tautologically conceived with the object (the outcome of development and its form of organization in institutions) fantasized as the subject (the maker of development or the social relationships that are responding to the objective material conditions that shape society) who failed to ensure sufficient grounds for development.

The reconstruction of Islamic history under the diktat of the dominant ideological power of capital is not innocent. It influences the current development debate and its attendant neoliberalism. Islam, a religion of a single colour, did not exist. It also does not exist now, as often professed in current propaganda masquerading as independent media or academia. Islamic civilization is a concrete historical process reflecting the manifold historical conditions in which it has evolved. It is as vast and varied as the different modes of life organization across history. Problems in documenting, analysing and periodizing this history would best be served by open-ended questions. The modest purpose of this chapter is not so much to highlight some of the underemphasized characteristics of the Islamic world, but merely to argue the falsity of imposing historically transcendent criteria upon the challenging road of historical development. The study of development must account for the historically determined circumstances that qualitatively demarcate one epoch from another. Of the many reasons behind the decline of the East, and of the Islamic world in particular, the succession of military defeats, the devastation over land by the Mongols and, more decisively, the expulsion from the seas by the Europeans, beginning as early as the twelfth century and reaching a climax in the battle of Lepanto in 1571, curtailed the transition of Islamic merchant capital into productive capital.³ In the more autonomous parts of the Islamic world, where indigenous capitalist relations would flourish of their own accord, the savagery of European colonialism put a speedy end to that.

There is a fundamental qualitative difference between capitalism (the historical phase) and its predecessors: it is a phenomenon in which dependency on the market determines nearly all aspects of social life. The private appropriation of social wealth draws the outlines of production, consumption and exchange under capitalism and necessitates a level of disengagement of assets and technology unknown in earlier times. However, it is

³ In his *Muqaddimah*, al-Duri (1969, 87–89) cites the great recession of 1400–1401 coinciding with the Tamerlane invasion of the Levant (including forcing many artisans to move to Samarkand), the beginning of European piracy and the onslaught of the Portuguese navy, which by 1509 had controlled essential eastern seaways and cut off the sea sources for Muslim traders.

not only that with competition relaying prices to profit-making agents, spurring technological development, and allocating resources to private ends that the capitalist economy becomes different from other modes of production; it is also because it becomes all-moneyed as opposed to partially moneyed (moneyed trade in luxury items on the margin of society, as opposed to moneyed trade in all sectors, including the subsistence ones). Under capitalism, a particular economic activity transmutes into the general by acquiring a money form; what it takes to support life – all the value that society creates – assumes the universal money form. A new unit of analysis comes into being as the particular economic activity fuses through the money form with all the other economic activities. All sectors become one in the universal money form. This whole that is the economy (the general condition) mediating the parts (sector-specific activity) through the money-value form comes into being as a result of the revolutionary moment when the means of political control over economic processes no longer derive from immediate subordination to feudal rank but from the relations between moneyed and objective commodities destined for exchange. This shift in the social relationship does not arrive on the scene *causa sui*; it glides upon the tide of growth in the necessities and the means to support human life. The subsumption of the particular economic activity in the moneyed whole develops gradually from the time the merchant begins to engage the craftsman for a wage in order to meet rising demand, until the time of commodification on a grander scale with the onset of the Industrial Revolution.

However, from the moment life-sustaining commodities begin to possess value destined only for exchange, their relationship would stand above society and determine the allocation of its resources, save opposition from the working class (Marx 1867). The issuance of credit to restrict or expand economic activity and money supply becomes a principal instrument in determining the living wage. The substance of the interest associated with credit and its impact on the livelihood of society is dissimilar to the usury rate affecting peripheral luxury trade on the margin of subsistence society. The generalized money form pervades the whole structure of society; the cost of money issuance and credit is itself the expansion of economic activity, and hence, an interest rate is collated against all economic transactions and the degree the rate assumes. Under capitalism, even the holding of cash involves variations in its value consequent upon the prevalent interest rate. Trade policy no longer affects single luxury-item imports but may cause the caloric intake of a significant population to plummet. Capitalism as a new sociological condition is the underlying basis for the new macroeconomic condition that takes shape in real and logical forms.

Markets may still be called markets, but they are not of the same nature before and after capitalism. One ought to question the reasons why mainstream economics adopts a position of historical development as growth of markets without regards to changes in their underlying social structures. Could today's level of human and physical asset underutilization have been carried out in the feudal age with society managing to overproduce? Not so, is the answer. When so many of the poorest and war-assaulted countries in the world are Muslim countries, one must ask how their poverty and debilitation by violent means have contributed to global accumulation. This chapter traces select features of Islamic development, namely the strand that views Islamic history as a linear process devoid of dynamism in order to brand European capitalism as the sole bearer of progress to humanity. Comparing progress over millennia is illusory. Because history is

read to influence the present, the only reason such a comparison would be posited is to justify the elimination of some version of the noble savage as the just price for progress. Madeleine Albright's response that 'we think the price is worth it', to kill 500 000 Iraqi children to bring Western-style democracy to Iraq, best illustrates the endurance of such an argument.

DEVELOPMENT IN THE ANCIENT MASHRIQ

The earliest places to develop into sedentary cultures were to be found in the present-day Mashriq (Ancient Syria and Mesopotamia). The area at the end of the Great African Rift Valley known as the Fertile Crescent was a natural gathering ground for domesticable animals; it enjoyed regular rainfall and a variety of easily cultivable cereals. The good soil quality circa 2000 BC produced about the same tonnage of barley as in early 1970s (Hilou 2004). The steady development of tools and modes of social organizations required regulation and the pacification of the labouring class. Measures for trade and laws to attenuate repression and limit the appetite of the clergy represent the first set of rules intended to steady the course of development: the Code of Ur-Nammu (2100 BC) (Real History World Wide n.d.). The code addresses three vital points: the ruling on weight for trade, a limit to what the clergy could extract in tribute, and a statement ensuring the protection of the vulnerable from the transgression of the powerful. These precepts crown the notion of the 'Just Man' of the East (al-Alawi 2009):

[i]n accordance with the true word of Utu, set the monthly temple expenses at 90 gur of barley, 30 sheep, and 30 sila of butter . . . the bronze sila-measure, standardized the one-mina weight, and standardized the stone weight of a shekel of silver in relation to one mina . . . The orphan was not delivered up to the rich man; the widow was not delivered up to the mighty man; the man of one shekel was not delivered up to the man of one mina (Ur-Nammu, 2100 BC)

Stripped of its mystique, justice was the veil behind which despotic societies pacified and regimented slave labour. The code itself did not relieve rulers from the pressure of rebellions; it was still an era characterized by a high frequency of revolts (Hilou 2004). Yet the codes *cum* welfare measures sprang in response to a history of revolts. Indeed, rebellion and the quelling of uprisings were central to the myths and beliefs of the Sumerians. In Atra-Hasis (mainly a flood myth but also with a creation story circa 1800 BC), the creation of humankind replaced angel-workers who rebelled against superior angels as they could no longer tolerate the harsh conditions of labouring the earth (Atra-Hassis, as compiled by Lambert et al. 1999). In this myth, man was moulded from the flesh and blood of a revolutionary angel whose ideas initially instigated the labouring class of angels into mutiny. Rebellion and/or the critique of living conditions in Sumerian myth constitute an inherent characteristic of humankind.

Four centuries later, the Code of Hammurabi further embellished the Ur-Nammu's demands for justice, the right to trade and the protection of civil and property rights:

To bring about the rule of righteousness in the land, to destroy the wicked and the evil-doers; so that the strong should not harm the weak, and enlighten the land, to further the wellbeing of mankind. He referred to himself as the 'shepherd of the oppressed and of the slaves,' and

ordered that ‘these my precious words’ be written upon his memorial stone, before his image ‘that the strong might not injure the weak, in order to protect the widows and orphans . . . in order to bespeak justice in the land, to settle all disputes, and heal all injuries (Hammurabi, circa 1750 BC; King 1915)

In comparison to the Code of Ur-Nammu, the Code of Hammurabi held the sovereign accountable for the delivery of welfare. If a tort could not be redressed by the law of equal retaliation (*lex talionis*), the state had to compensate for the loss itself. The other side of the *lex talionis*’s ‘an eye for an eye’, is ‘a sack of wheat for a sack of wheat’. The sovereign acted as an insurance institution to indemnify losses. To avert peasant unrest, the sovereign had to protect the peasants of the lower echelons from injury. Moreover, the rights of women to own property and divorce husbands – rights that women lack in some states today – became binding laws.

To the Ancient Mesopotamians as well as the Greeks, whose societies were raised by slave labour, strengthening the home front by more equitable distribution as wealth rose plastered over the fault lines of their class-ordered social structures. Material circumstances and social orders were changing and concepts were evolving, but it was not until Heraclitus that change was considered eternal law. Heraclitus stood opposed to unchangeability; his dynamic concept would later challenge Plato’s notion that change is a matter of appearance whereas reality is unchangeable and only penetrable by discerning the forms of thought (Ilyenkov 1977). Later in Aristotle’s *Politics*, a cycle of change and a schema of organic growth, defining development from birth to peak and ultimate dissolution, took shape. However, similarly to the Mesopotamian ‘Just Man’, Aristotle’s ‘Rational Man’, through implementing equality, engendered a functional role to avoid collapse from within:

Equality consists in the same treatment of similar persons, and no government can stand which is not founded upon justice. For if the government be unjust everyone in the country unites with the governed in the desire to have a revolution, and it is an impossibility that the members of the government can be so numerous as to be stronger than all their enemies put together. (Aristotle 2014, *Politics*, Book 7)

EQUALITY IN ISLAM

Whether by word of man or word of God, steadying development requires the attenuation of distributional imbalances. The issue of equity seems to be remarkably similar, but cyclical, across culture and time (Reinert 2013). In Islam, as in any viscous theological thesis, equity echoes God’s ultimate edict on the one hand, while inequity can be God’s manifestation of wisdom on the other. Equality is central to Imam Ali’s treatise on faith; he was a contemporary of the Prophet, whose sermons emphasized social justice. In his *Nahj al-Balaghah* (The path of rhetoric), the inherent equality of all men is established as canon. Sayings attributed to Ali such as ‘people are as equal as the teeth of a comb’ or, a more pertinent quote, ‘people should have equal access to such resources as water, food and fire’, are often flaunted to display Islam’s knack for egalitarianism (Bin Abi Talib 1963). Apart from the right of access to common waters, which remains in practice in some outlying areas of the Muslim world, the Muslim world consistently exhibited

disparate living conditions. Given the importance of water in mainly arid regions, reserving part of the *al-afraj* irrigation system to common use exemplifies the necessity to obey some fairness in rationing water distribution (Wilkinson 2003).

Imam Ali hailed from the lower tribal ranks of the Quraysh (the Prophet's tribe) and his reflexive egalitarian position is rebutted by just as many other views sanctifying inequality. Religious intellection reflects the real practice and the ideology of the power structure. To the many interpretations that tout Islamic egalitarianism, there are just as many positions ordaining inequality by divine fiat.

Islamic doctrine is a diverse field of practice and thought, especially so in areas influencing resource allocation. According to the Shafi'i School of Sharia, there is no obligation to pay *zakat* – compulsory charity to assist the poor (Samak 2007). *Zakat* (voluntary payment) is separate from *kharaj* (state taxation levied upon Muslim subjects), but the former is the rationale for the latter.⁴ The case when great wealth and poverty can coexist finds its roots in Quranic verse: 'It is we who have apportioned among them their livelihood in the life of this world and have raised some of them above others in degrees [of rank] that they may make use of one another for service' (Surah 43, Aya 32); contrariwise, there are far too many *ayas* that extol the virtue of social equality:

The Quran does not proscribe privileges based on the ownership of certain assets, such as the means of production and the sources of material used for production, that confer enormous power over the whole of social life . . . that is why throughout history the spectacle of a poignant poverty contrasts with the astonishing luxury prevailing at the courts and among the rich. (Rodinson 1978 [1966], 308)

Quranic *ayas* draw upon specific occurrences during the last two decades of the life of the prophet. *ayas* promoting justice are incident- or context-specific, and, unlike the asceticism of the New Testament, the Quran sees in wealth an adornment of worldly life (Surah 18, Aya 46). Unlike religions that urge the complete suppression of hedonism, Islam recognizes worldly desires but ordains disciplining them.⁵

However, the twisting of the meaning of Islamic justice by modern Islamists assumes new heights as justice becomes equated with the trickle-down effect of neoliberal markets.⁶ Obstructions of unrestricted trade, free capital flows and market openness become violations of Islamic justice (Chapra 2014). 'Free movement of goods, people and capital accelerate development and further cement solidarity and integration, which are among the important objectives of Islam' (Chapra 2001, 7). The neoliberal recipe is central

⁴ According to al-Duri (1949), the various tax regimes adopted different meanings across the Islamic world. Here I have used the two most current categories for Muslims and non-Muslims.

⁵ Discussion with Ahmad Ra'ouf Al-Qaderi, Mufti of the Hermon region in Lebanon, 2011.

⁶ The present-day hold of free market ideology was such that when Islamic economic practice was reinterpreted and caricatured in what became known as modern Islamic economics, its liberalism exceeded that of neoliberalism. The projection of old Islamic thought upon the modern world without major qualifications can be meaningless, because under capitalism commodification prevails and, at least in one area, there is a necessity to disengage assets that did not exist in Islamic times. Modern Islamic economics, like neoclassical economics, falsely constructs history as a set of homogenous commercial relations continuous across time. The modern capitalist market little resembles the Islamic market of the past. In the time of the caliphates the market extended narrowly to luxury goods and barter, such that when disrupted, it resulted in no major perturbation of day-to-day existence. By contrast, under capitalism, market activity determines the near totality of social life.

to development, and it is (Islam-wise) unjust to stand in the way of such development (Chapra 2001).

Islam, in its modern economic interpretation, is presumed to be a precursor to Ricardian comparative advantage. However, by the time of Ricardo, trade in essential commodities would have determined whether societies starved or not as a result of trade policy. Conditions in Ricardo's time cannot be superimposed on long-distance trade in luxury goods in pre-capitalist times. There is utter disregard for the diachronic development of concepts or the social relationships that underlay forms of social organization. It was not freer trade across time that created or diminished wealth, it was the growth of merchant capital into productive capital and later the intensification of commercial exploitation (the enslavement of whole countries) in the colonies prior to the Industrial Revolution that unleashed higher productivity. To collapse justice into free trade following the twisting of Islamic edicts and to gratify commerce for the sake of commerce have no bearing upon justice in terms of wealth distribution. The class that controls the valves of the circuit of value also determines the degree of social equality.

Pre-capitalist collection of tribute through *kharaj* (tribute from Muslim subjects) and *jizyah* (tribute from non-Muslims), mostly in *a'shar* (tithes), directly involves the reigning political authority in maintaining the sustainability of the population and the productive base through foremanship and income redistribution. The evolution of Islamic justice, welfare rationale and practical redistribution measures depended on historically specific circumstances, rising with wealth and political stability. Professor Reinert refers to the work of Ibn Hussein (775–822), writing at the peak of Islamic civilization and highlighting the notion of just tax distribution:

Distribute [taxes] . . . among all taxpayers in a fair, just and equitable manner and make them general, not exempting anyone because of his noble rank or great riches . . . and do not levy on anyone a tax which is beyond his capacity to pay. (Ibn Hussein, as quoted in Reinert 2013)

In his introduction to the wealth of literature on political economy at around this time, Noueihid (2014) lists the contributions of three other scholars whose distributive policies agree with those of Ibn Hussein:

1. Early works on money and taxation, titled *Al-Kharaj* by Al-Qurayshi circa 750, detailed the various forms of taxation from land, and stressed egalitarianism between Muslims and non-Muslims in terms of access to resources. He put forth the avant-garde thesis that land belongs to whoever labours it, thus antedating modern land reform discourse.
2. Another work, also titled *Al-Kharaj*, of around the same period by Ya'coub bin Youssef explores the empire's financial policies, its sources of revenue and its expenditures. Bin Youssef's principal contribution is in bestowing statutory rights upon public property. Access to public property as a right stood above dispensation of individual privilege. Public property included trading routes, on rivers and over land, access to water, and to common grazing lands.
3. At around AD 850, a more sophisticated work, *Al-Amwal* (literally *Moneys*, but a more appropriate translation would be *Wealth*) by Ibn Salam, proposed centring the

activity of finance on public works, rejuvenating old land and creating incentives to bring new lands into production.

This was the zenith of Abbasid prosperity. For all three authors mentioned above, the welfare policy proposed that no person should be saddled with inhumane taxes and that the caliphate should intervene to support the weak and exempt them from taxation. For Ibn Salam, justice went further in the sense that the burden of taxation should be shared equally between Muslims and non-Muslims. In earlier times of penury, circa 650, under-privileging the poorer strata in the Arabian Peninsula in terms of tribute distribution contributed to the first Islamic civil war, the Battle of Siffin (Hitti 1970; Mroueh 2008 [1978]). Tribute and booty redivision marked fault lines between clans that could lead to conflicts. Intervention to maintain a certain degree of stability derives from relative wealth levels in real historical circumstances. However, averting destruction of capital assets, population decline and introducing some measure of equalization payments were commonsense efforts that have stabilized the process-surplus extraction.

EXPANSION BY ECONOMIC ZEAL

Few of the caliphs were fundamentalist zealots. Only 30 years after the death of Muhammad, the clan least committed to faith, the Umayyad, assumed power. They concentrated their efforts on expanding moneyed wealth rather than expanding conversion to the faith (Mroueh 2008 [1978]). In the two broader forms of tribute that prevailed throughout the Empire, *kharaj* and *jizyah*, the latter higher rate of taxation was favoured by the caliphs (Mroueh 2008 [1978]). In narrow accounting terms, the rate of caliphate revenues would shrink with a higher rate of conversion to Islam, which implies that caliphs would have been averse to high rates of conversions. Evidently the non-accounting (real) historical process had too many departures from this static rule, since revenues varied in relation to political stability. There is a consensus among secular Arab historians that adherence to faith was not a strong point of the caliphates (Azmeah 1995). Arabs conquered a great part of the world in the name of a new religion, but they were not very religious, and their motive was wealth rather than religion (Russell 2004 [1946]). Russell adds that 'it was only by their virtue of lack fanaticism that a handful of warriors were able to govern without much difficulty' (ibid., 414).

Early Islamic caliphates (the Umayyad) levied lower tax rates than Byzantine or Persian empires (Taqoush 2002). The Turkic tribes of Anatolia began converting to Islam only three decades after the death of the Prophet, partly on account of dodging heavy Byzantine taxation (Mroueh 2008). The same tribes would later rebel against the last Umayyad caliph in Harran on account of higher tax rates (Mroueh 2008 [1978]). In certain parts of the Byzantine Empire bordering the caliphal territory (Asia Minor), Umayyad caliphs shared tax collection with Byzantine Constantinople (Taqoush 2002). It is also around this time (around 100 years after the death of the Prophet) that the Umayyad extended their rule as far as Spain in the West and Central Asia in the East. In its early stages, the official language of the Islamic caliphate remained a variant of ancient Greek, the Koini of the Seleucid Empire (Hitti 1970). It was not until the Umayyad Caliph Abd al-Malik bin Marwan fought and won a limited battle against

Byzantium (AD 692) that the official language and the currency of the empire began to be Arabized (Taqaoush 2002).

Tribute flourishes with a growing human and physical infrastructure. Evidence of conditions that provide for higher tribute or tribute-collection awareness in Islamic conquests emerges as modern excavators unearth no layers of black sediment; they did not sack conquered cities (Donner 2011). There were exceptions to this rule, as in the sacking of Amorium (c.AD 838), allegedly in retaliation for the Byzantine destruction of Isparta, the town of the Caliph Al-Mu'tassim's mother, who reigned from AD 833 to AD 842. In staking new territory for booty, Muslim caliphs had preserved capital assets required for steady productivity. In societies that depended on population growth and in which productivity would decline with marginal lands, it was common sense to avoid outright demolition of assets. This strategy of expansion, more by commerce than the zeal of religion, is eschewed by modern-day Islamists as in Zaman (2009).

ISLAM AND THE EAST

While the Islamic world did not leap into capitalism, despite enjoying significant merchant capital, neither did India and China. Its lagging behind the transformation to capitalism cannot be attributed to inhibitions particular to the Islamic faith (Rodinson 1978 [1960]). The Orient failed this transition to capitalism altogether. This failure cannot be ascribed to retrogression in cultural development because Islam did not entirely object to scientific progress. In the epoch in which Islam was the leading civilization, major scientific progress was recorded:

For four or five centuries, Islam was the most brilliant civilization in the Old World . . . nothing less than trigonometry and algebra . . . mathematical geographers, astronomical observatories and instruments, optics, for chemistry, pharmacy. More than half the remedies and healing aids used by the West came from Islam. In the field of philosophy, the scope of this rediscovery, however, was not limited to copying and handling on, valuable as that undoubtedly was. It also involved continuing, elucidating and creating. (Braudel 1995)⁷

Brilliant as Islamic civilization may have been, for Braudel European 'true capitalism' remains justified on the basis of Eastern stagnation and thus, for Professor Goody, Braudel's vision is Eurocentric (Goody 2007). The frame of reference of many Western

⁷ Braudel is a rarity among Western scholars to attribute creativity in philosophy to non-European cultures. The chauvinist mantra repeated *ad nauseum* is that civilizational advance always mimics Western philosophical rationality, or that Muslims only copied and translated the Greeks. It is common sense that whether through written or verbal transmission, any society conceptualizes its specific life processes, and thus philosophizes; that is, investigates its state of being and knowing – its mode of existence. The question as to whether the construction of thought should follow a formal framework is not relevant for the construction of philosophical thought. Formal logic was given new life and systematized by Leibnitz in the late fifteenth century (Ilyenkov 1974). Hegel, whose science of logic sublated formal logic, adopted an approach that draws theory from the course of spiritual and cultural development in time, and he, above all, remained quintessentially philosophical. Assuming that modern formal symbolism was incubated in something historically Western, when the West as such was not yet born, is a delusional offshoot of nationalism. There is just as much 'philosophical rigour' – rigour defined by convention – in rationalizing a social process from a historical or a literary angle as from an angle of formal analytics.

scholars is European, and this Eurocentricity can hardly be avoided unless European colonialism is held to account for its systemic aggression against the colonies. The way European aggression is thought of in terms of being necessary or not, defines Eurocentricity. In this respect, Braudel underemphasizes the necessity of aggressive expansion to European capital, and its impact on destabilizing the Orient, as in causing it to stagnate or decline. This stance assumes that a nation's wealth is a function of the specialization of productive tasks that ensues from the division of labour, the degree of which is determined by the extent of the market (Brenner 1977). But even for Brenner, when the market itself is qualified by the capacity of the owning class to reproduce their class position within the market economy, say by reducing costs as the direct producers lose their means of production (proletarianization), the space in which incipient capitalist development occurs is confined to Europe. To him, it is not so much colonial plunder as opposed to changing capitalist relations within Europe.

The early capitalist developments in Europe are often contrasted against an Asiatic mode of production (AMP), exhibiting loosely defined property relations, self-sufficiency of village production, unity of handicrafts and agriculture, simplicity of production methods, or the conditions of stagnant growth from which it could not have escaped. To break from the idleness, a social system requires shifting class structures in relation to the drivers of the growing world market, be they demographic, commercial or industrial. How is one to explain the apparent stagnation of the AMP, when only two and a half centuries ago, in *The Wealth of Nations*, Adam Smith (1977 [1776]) makes reference to an industrious and rich East? The reason is that from a Eurocentric perspective the answer to the question of why the East and Islamic world did not assume forms of capitalist relations prior to Europe will always neglect the growth of capitalist markets by the exercise of violence and expropriation – because commercial exploitation (reducing subject-object to object or people into things as in slavery) or the extraction of surplus as a result of lowering the price of labour power or subsistence income through the price system to values that prematurely waste human lives (super-exploitation). Even when by the odd chance the answer underscores the role of imperialist pillage in the growth of capitalism, it distorts Marxian value theory, as in falsely bestowing a nationalist character upon an internationalist production process and, hence, making Western lives more valuable than others. The kernel of the Eurocentric argument is to dehistoricize development and justify European wealth with European capabilities. In short, Eurocentric history, which is nearly all of historiography, understates colonial violence and plunder.

INVOLUTION AND THE ASIATIC WAY OF LIFE

The concept of the AMP is a broad category, but two characteristics are often touted as differentiating it from European feudalism. Firstly, the centralized bureaucratic empires in Asia historically exercised control over land and played a strong role in the construction of irrigation works that were vital to the success of the indigenous agricultural systems. Secondly, the village economy of Asian societies was taken to be essentially self-sufficient and self-contained, with production for exchange centred on use value (Hobsbawm 1965). This steady growth without leaps, or the state of involution, rests on a set of pre-capitalist social relations, principally the Asiatic feudal class extracting

surplus on the basis of combining absolute economic and political power. Capitalism as a historical phase is determined by a rupture in the social relationship binding political and economic powers and corresponding to the development of productive forces, including science, technology, population growth and modes of labour organization (Dobb 1946; Sweezy 1976; Abdel-Malek 1981; Amin 1977).

With respect to technology, there will always be technical improvements across history that do not necessarily lead to capitalism (Wood 2002); however, under capitalism the creation of technology becomes an innate offshoot to the circulating commodity, falling outside of immediate social control (objective), destined for exchange and its associated social relations. Although reducing energy consumption per unit of output indicates technological development, the higher speed with which capitalist technology grows arises out of the social pressure to produce by competition through the market. This intensifies the contradiction with the outdated constitution of the machinery, bringing together motor power, transmission mechanisms and tools in a more energy-saving and compact process that foregrounds higher production capacity (Marx 1867, Ch. 15). Under capitalism, competition renders technological advancement endogenous, not so much because there is a variable in an equation like human capital that grows through its interdependency on better machine technology, but because private appropriators in their anarchic accumulation rip away technological advance from social control.

Yet not any technological development across history will shift up the productive forces and hence propel society into capitalism. There cannot be capitalism without a dialectical collision of coincidence and necessity in the development of several elements of the productive forces, including technology, population growth, forms of primitive accumulation and changes in the organization of the reproduction of society. When capitalism begins to take shape, the mode of production changes from use-value constrained production into production meant for exchange, whose value is alienated from the direct producer and which acts as a self-expanding relationship dictating the pace of social life, no less including spurts in technology.

It would be counterfactual history, as well, to assume that prior to the interrelated development of the productive forces and their corresponding relations coinciding with the growth of merchant capital, proletarianization and larger ownership of assets could summon capitalism in any prior epoch. The Plebeians of ancient Rome, free peasants each cultivating their own piece of land, were expropriated; they were divorced from their means of production and became poor. Alongside them a mode of production developed which was not capitalist but dependent upon slavery (Marx 1877). The genesis of European capitalism cannot be applied across the board to all times, as 'events strikingly analogous but taking place in different historic surroundings led to totally different results. By studying each of these forms of evolution separately and then comparing them one can easily find the clue to this phenomenon, but one will never arrive there by the universal passport of a general historico-philosophical theory, the supreme virtue of which consists in being super-historical' (Marx 1877).

Similarly, it would be hypothetical to theorize that because Islamic feudalism differs from European feudalism – the Islamic peasantry in the countryside enjoyed greater freedoms – it would have been difficult for the independent Islamic peasantry to be dispossessed by a central authority and forced into wage labour (El Kodsí 1970). Aspects of primitive accumulation and the making of private labour into social labour stem from

changing relations of production, as commercial capital implicates by the forces of its own development a rate of surplus-value extraction attendant on socializing labour and its means of production. Super-historical or trans-historical transpositions, whichever term one uses, only explain hypothetical history, especially juxtaposed to periods preceding the development of capitalist production relations. The rise of Europe in a specific period – real history – is the historical fact that requires explanation.

There is no single version of the AMP. In the AMP many forms of political and property control over social reproduction prevailed. Broadly, the Islamic mode of production has had an unsteady central authority incapable of reaching far and applying general rules (Rodinson 1978 [1966]; Khalil 1996). As in other pre-capitalist formations, the production of use value for subsistence, from which surpluses constitute tribute, prevailed. The ideological aspects that shape social control revolve around bonding labour to land, mostly by adherence to faith. In terms of religious beliefs regimenting labour, the Islamic world differed by the degrees of variation between the many sects and *tariqas*. The faiths *cum* ideological variations indicated that degrees of submissiveness to the central authority also fluctuated; however, self-sufficiency in village agriculture was steadier on average for all the East vis-à-vis Europe (Frank 1998; Godelier 1964).

The saliency of the AMP arose as Marx paid more attention to primitive accumulation in his later writings (Hobsbawm 1965). Dismayed with the prospects of the revolution in Europe, Marx turned to communal forms of social organization (especially Russia) and began to assess the value that commercial exploitation imparts to central wealth (Emmanuel 1972). However, if there were to be a single dynamic that characterized the Orient, it would be empires with highly organized administrative structures that could rise and fall in rapid succession, although their underlying economic life might continue relatively unchanged for long periods of time (Braudel 1995). The empires' changing forms of social control or revolutions, which resulted in intermittent political economic freedoms from serfdom, did not transform merchant capital into small-scale manufacturing and then industrial capital. The articulation of internal social relations affecting social control with the growth of merchant capital resulting from increasing external trade – this evolving unity as such – originated in the West and not in the East.

In debating the origins of capitalism with Dobb, Sweezy held that the roots of capitalism were unrelated to inherent conditions originating in England or in Europe (Sweezy 1976). It was not anything peculiarly European, such as free spiritual development (Bacon or Hegel), early forms of parliamentarism or bourgeois forms of organization, that ruptured the monotony of feudalism. The crepuscule of the fifteenth century instantiated developments combining advances in the forces of technology, communication, trade, rising supply of gold and silver, and growing population after a period of decline, engulfed the planet and particularly the Mediterranean basin.⁸ Interrelatedness through culture and trade implies that transformative conditions cannot be attributed to a specific locality without a high dose of arbitrariness. In particular, European military superiority at sea cultivated the fruits of these globally generated developments in the productive forces. The mediation of rising exchange through trade necessitated a division of labour,

⁸ World population declined from around 1250 to 1450 according to estimates of the US Census Bureau, available at http://www.census.gov/population/international/data/worldpop/table_history.php (accessed 23 January 2015).

rising numbers of wage workers and output, and the subsumption of outlying territories by violent means as tributaries of production. The endogenization of technological innovation and wars of encroachment developed as a result of a shift in the relations of exploitation from direct surplus extraction by feudal absolutism to an indirect form of value creation (through fetishism), or through the medium of commodity exchange through the market. There arose a subordination of the invention of technology and the engagement in political violence to anarchic conditions of accumulation (driven by competition). The implication of these intrinsically generated developments is that the organized dimensions of capital and its institutions would not be able to curb the appetite for war and technology that may threaten human existence, save the political power of an organised and internationalist working class.

In contrast to capitalist relations springing up at different rates across sea-trading routes, an approach resembling cosmological inflation (the rise of the universe from a single equation) situates the rise of capitalism in the English countryside. A politically weakened English aristocracy as a result of the English Revolution, relying more on rising agricultural output by innovation than on feudal fiat to draw a surplus, created higher output per hectare, foreclosed the peasantry and laid the foundations for capitalist accumulation (Wood 2002). However, by the sixteenth century, more violent forms of primitive accumulation wresting control of resources across sea-trading corridors were already nurturing the growth of European merchant capital and, specifically, English merchant capital.⁹ Primitive accumulation, the transformation of merchant capitalism into capitalist accumulation, is broader than the British Isles. Acquisition of immense resources by means of war around the world transformed merchant capital; a transformation to which the English agricultural revolution responded. It was not some post English civil war weakness of the English landed aristocracy that ushered capitalism; it was the forced wresting of value from the colonies and assigning it a money value for exchange by a signalling mechanism emerging from a growing market for commodities:

The discovery of gold and silver in America, the extirpation, enslavement and entombment in mines of the aboriginal population, the beginning of the conquest and looting of the East Indies, the turning of Africa into a warren for the commercial hunting of black-skins, signalled the rosy dawn of the era of capitalist production. These idyllic proceedings are the chief momenta of primitive accumulation. (Marx 1867, Ch. 31)

The broad range of commodities acquired by merchant capital, having objective value on their own and whose interrelations have replaced relations between humans, created new social forms of organization and institutions that could not have existed before. In a commodity produced for exchange, value (socially necessary labour), the natural form of value (use value) and the social form (exchange value) are moments of the same expression of value inseparable from the fetishism attendant upon the production of commodities, a 'fetishism which clings to the products of labour as soon as they are produced as commodities and which is therefore inseparable from commodity-production' (Marx 1867). The commodity as self-expanding value dictates its terms to society. Its realization

⁹ Unlike England, the East had undergone a perverse transformation resulting in expropriation without re-engagement of resources, thus slowing its growth (Patnaik 2012).

in sale away from home shapes the conditions for production, distribution and the division of labour at home.

In parallel to European development, one ought to recall that where capitalism developed on its own terms in the East, as in the modernizing Ottoman Empire of the nineteenth century, Islamic values or institutions did not obstruct capitalism per se (Rodinson 1978 [1966]; Turner 1993). Lethargic capitalist development as it occurred in the East is also attributable to policies of colonization that arrested any type of modernization to countervail European ascent. This draws us closer to the two misconceptions relating to Eastern involution: to begin with, the East and the Islamic world were not too stagnant and, subsequently, as capital took hold of development, intense colonial assault thwarted the development of the Islamic productive forces.

A NOT SO STAGNANT ISLAMIC WORLD

From its *hijazi* beginnings through the Mongol and Crusader invasions to European imperialism, numerous political upheavals have unsettled the Muslim world. The first significant revolt against the Abbasid Caliphate arose from the Al-Zot tribes of Iraq, which were Indian tribes resettled in the plains of Mesopotamia. The many revolts that followed – such as *Al Zanj* (the African revolt) and the Carmatian revolt (they were an Isma'ili sect that attempted to set up a Utopian state) – and the speed at which the Islamic Empire splintered would have created space in which the tenant farmers could come to exercise more control over their lives. There was no monotony to the politics of Empire, and the depth of revolts would end up in some form of state- and land-control restructuring. But in none of these did capitalism, the social relationship that socializes labour, ensue (by 'socializes' I mean make private workers into wage or social labour). For the many Shiite sects that governed central territories, especially the Isma'ilis, liberal control empowering the direct producers and communal ownership would prevail from time to time (Mroueh 2008 [1978]).

The hand of the central authority in exercising executive powers, promulgating laws and implementing them was unsteady. However, the economic laws underpinning the life of society were quite steady and tied to the slow pace of development in the accumulation of wealth and the social relations attendant thereupon. Economics, unlike politics, transcended the immediate peasants and their communities, and articulated them to an ongoing economic structure larger than the immediate locality centred on the common material basis of society, namely subsistence agriculture (Braudel 1995). The history of a splintering empire and successive peasant revolts only nominally reorganized the economic structure; ordinary everyday life still depended on staple crop production meant for personal use, regardless of changes to the polity. Insofar as it was history undergoing the labour of political revolts, Islamic history was incapable of delivering or of bringing into being a new structure of capitalist social relations:

A peculiar antithesis to this was the religious risings in the Mohammedan world . . . The townspeople grow rich, luxurious and lax in the observation of the 'law.' The Bedouins, poor and hence of strict morals, contemplate with envy and covetousness these riches and pleasures. Then they unite under a prophet, a Mahdi, to restore the observation of the true faith and to appropriate in recompense the treasures of the renegades. In a hundred years a new purge of

the faith is required, a new Mahdi arises and the game starts again . . . when they are victorious, they allow the old economic conditions to persist untouched. (Engels 1894)

Preceding Engels, Ibn Khaldun had observed a circularity in terms of the Nomadic–urban conflicts that led back to the same social conditions as a result of fluctuation in his *asabiya*’ (al-Attas 2013). History then becomes a sequel of tribal wars, not leading to any radical changes in development. Reinert observed that in Ibn Khaldun’s pre-industrial setting, history logically becomes a cyclical sequence of tribal wars – with foreign supporters – fighting over the static and non-productive rents that accrue to the nation’s or region’s capital (Reinert 2013). Reinert sees that the forces that broke the Ibn Khaldunian circle of rent-seeking tribal violence were the simultaneous development of a large division of labour and the growth of increasing returns in industry which made capital an asset to all sectors. He traces these developments to Dutch and Italian city-states that first broke with the zero-sum game of constant and inequitable returns.

Improvement in the productive forces and a concomitant rise in the complex division of labour in Venice were also Engels’s account of capitalist development (Engels 1894). These transformations occurred when Europe began its state of political ascendancy. The period after 1492 was a time of great geographic-commercial discovery, and the sudden expansion of the market area that followed the revolution in communications linked to it. The expansion of production to meet growing trade via the employment of wage labour and the collusion of states and trading companies that conquered and exploited new territory underpins the ascent of capitalist production relations (Engels 1894). It is also at this point that one may speak of individual merchant wealth rising steeply with the militarization of trading companies.

Crises of underconsumption caused by natural disasters or maldistribution characterized pre-capitalist formations. The strains of these crises partly fuelled the drive for expansionary wars. Given the low technical capacity necessary for rebuilding after conflicts, wars would bring to a halt centuries of progress. Unlike capitalism, which is endowed with the scale capacity to reconstruct and re-engage assets at high turnover rates, a strategy of pillage in the pre-capitalist age represented a one-time gain, after which the losses in tribute from ruination amounted to long-term losses. One of many reasons that the Islamic world failed to leap into capitalism before Europe is that the devastation of the Mongol and Crusade invasions imposed a drag on wealth accumulation and developmental progress. But most definitively, the reasons were the European encroachment on global offshore trading posts and the cheaper and more secure trade routes limiting the sea-trade platform by which Islamic merchant capital would have grown. These European incursions and later complete hegemony dashed the basis upon which merchant capital may have transmuted into productive capital.

Huge Islamic metropolises with tens of thousands of artisans grew at low and constant rates. Just prior to the surge of Europe in the sixteenth century, many Eastern cities incurred the wrath of the Mongol invasions. It is difficult to assess the deaths from the Mongol invasions in Baghdad, one of the biggest cities of the East, but Arabic sources present figures that vary between 500 000 and 1 million (al-Duri 1969; Taqoush 2002). In *A History of Western Philosophy*, Russell remarks that around 850 000 people perished in the sacking of Baghdad (Russell 2004 [1946], 414). Pursuant to the fall of Baghdad, between 1258 and 1335, state revenue declined by 90 per cent, while only a tenth of the

cultivable land was put into production (Abu-Lughod 1989). The degree of Mongol destruction initially spanned nearly the whole of the East and although al-Duri (1969) notes improvements in certain artisan activity, the war with the Mamaluk limiting sea and land trade and Nomadic interruptions imposed ostensible barriers to mercantile development: 'being continually interrupted by political events, just as all Levantine trade collapsed owing to the Mongolian and Turkish invasions when the great geographic-commercial discoveries after 1492 only accelerated this decline and then made it final' (Engels 1894).

Within the straitjacket of analytical Marxism, if such a study could exist at all, Asiatic stability as 'the secret of the unchangingness of Asiatic societies' reflected a constancy in the development of productive forces that was matched with torpid progress in production relations (Marx 1867, 248). Key to the secret of the unchangeableness of Asiatic societies is the stagnation resulting from the 'simplicity' of the organization for production in these self-sufficing communities that constantly reproduce themselves in the same social form, and when accidentally destroyed, they spring up again on the spot and with the same name (Marx 1867, 248). Asiatic society seen from these 'out of context' quotes, as is often the case, does not do justice to Marx. Simplicity buries within it the unison of unripe productive forces with Islamic defeats and expulsion from sea-trading routes. In a race for time, few Asian cities rebuilt their past glory from the devastation wrought at the hands of the Mongols, the Crusaders and Tamerlane's great recession (1400–1401 crisis). Looting Crusaders travelling on Venetian ships, Portuguese fleets ousting the Muslims from the Eastern seas, and ultimately, the Ottoman loss at Lepanto in 1571 eradicated Asians and Muslims from major sea-trading posts. These dislocations were not aberrant statistical outliers; they were decisive in reducing the scope and scale for trade that would have transformed merchant capital into productive capital.

In nineteenth-century Europe, information about the East exhibited a Eurocentric bias. Questions related to the AMP were addressed by European scholars to explain the European transition to capitalism and not Eastern development (Turner 1978). Asiatic society was misconceived as a series of missing private property and bourgeois institutions. Asiatic society was a manifestation in Marxism of an Orientalist problematic inherent to European philosophy (Turner 1978). Anderson (2010) shows that Bryan Turner and Edward Said had only read a partial account of Marx and that their views were one-sided. However, even if one missed reading the whole of the Marxian material, the method of Marx cannot stop at the general characterization of facts without identifying the social contradictions that underlie their state of becoming. Understanding capitalism as a system of class and power relationships feeding off the expropriation of direct producers would inevitably lead Marx, or any other thinker utilizing the law of value, to point to the necessity of wars of encroachment to capital as the form of expropriation of the colonies. The use of necessity here is crucial to the argument because it organically ties together global development under capitalism.

There is always a store of knowledge or a frame of reference that is conditioned by the available information and the ideological direction upon which authors rely. Collecting facts and moralizing about the oneness of humanity does not exonerate one from Orientalism or Eurocentrism. Already, the ideological structure of capital inherently promotes symbolic and actual forms of dividedness that oppose the centripetal forces that may equalize labour across the globe. On more solid (political-economic)

rather than cultural grounds, only the recognition that resource and value grab by violent means forms the material basis of social reproduction under capitalism rids one of Eurocentrism or Orientalism. Incidentally, for Abdel-Malek, it is not any liberal notion of othering or otherness that earmarks Orientalism; it is the historical surplus value and wars of expropriation that reproduce Orientalism as intellectual practice. This historical surplus value may be defined as the wealth amassed from wars of colonization and from the value that developing countries impart to colonizing countries by virtue of their deliberate de-industrialization (Abdel-Malek 1963). Had Marx only held the position of Eastern stagnation without concluding that it was the early colonial wars that set the East back, his position would have been fully in accordance with any Eurocentric characterization of the AMP. A bias depending on one's frame of reference will always exist, but it is the method of development by contradiction that necessarily removes Marx from the Eurocentric circle. The litmus test of Eurocentrism is straightforward: in historically determined, income, wealth and cultural circumstances, the rule is that imperialism does not, in the slightest, impart progress to the colonized world. Of course, historically determined wealth shifts the level of subsistence income upwards, for all but the devastation of the colonies must be gauged in relation to the social dislocation that it incurs in relation to wealth-making in the centre. For the sake of perspicuity, one has to posit that the production of a Western commodity begins with the invasion, say, of the Congo, and thus global wealth inequality for the Eurocentric is based on a value system that assigns a lower value to the Congolese life that perished as a result of European wars of colonization.

THE INFANTICIDE OF EARLY ISLAMIC DEVELOPMENT

Across the Muslim world, class relationships until circa AD 1800 remained locked in the Asiatic-type articulations. One cannot say 'Eastern despotism' here because there were more, or at least similarly, brutal forms of slavery in Europe than in the East. When Islamic-indigenous conditions ripened for change, ushered by Ottoman modernization (al-Duri 1969; Mundy 1975), the devastating impact of European colonialism consigned development to commerce (during and after colonialism). European colonialism had become the principal political force in breaking old forms of social relationships and organizations, forms of property, local innovation in knowledge and political structures, but always in ways that preserved feudal regimentation and shunned industrialization. As a rule, colonial policy deployed resources in tandem with the demand of central capital (Baran 1957). Internally growing Islamic capitalism became subordinated to Western capitalism and fettered by the ancient hierarchies without the partial emancipation attendant on budding bourgeois forms of social relations. When the European state acts at the behest of capital, it subjugates a peripheral formation into a production outlet of raw material or relegates it to the lower echelons of the value chain. It is not comparative advantage or free trade which prompted colonialism; it is partly for the purposes of suppressing ingenuity in manufacturing or arresting emulation that developed countries invade the colonies (Emmanuel 1972; Reinert 2008).

In contrast to the high quantities of gold and silver circulating in the Western hemisphere as of the sixteenth century, money in the East remained comparatively scarce until

the early nineteenth century (Taqoush 2002; Kivılcımlı 1987). In-kind transactions, rent coinciding with tribute in sharecropping supporting the armies of Empire, represented the mainstay of fiscal policies; until the late 1700s for the Ottoman Empire. As of the early nineteenth century, with rising volumes of money and trade in cash crops, part of the surplus product would be appropriated in money-form taxation. Ground rent wrought in kind declined, but the agricultural area expanded as a result of the cash and titled property incentives provided to reclaim outlying lands used for cash-crop culture (Owen 2004). The change in the wealth base of communities, resulting from revamping modes of subsistence into cash-crop culture, restructured channels of appropriation between various communities; and revolts swept parts of the Islamic world, shifting old class structures and precipitating civil conflicts (Lutsky 1969).

The more autonomous part of the Islamic world, the Ottoman Empire, had experienced genuine internal progress (modernization) by its own capacities towards capitalism (Mundy 1975). With the onset of European colonialism and the redesign of older forms of political organizations into vassal nation-states, the historical process making the Islamic world became a product of the exercise of colonial power. There were cash-crop cultures, textile industries and vibrant commercial sea-trading posts prior to direct European colonialism across the Islamic world. Colonial assault degraded these capacities, especially cotton textiles in Egypt and silk cloth in the Levant. Although the restructuring of pre-capitalist social relations began under late Ottoman modernization and momentum was building for a bourgeois transformation conceived by local means, colonial forces perverted these changes in a manner destined against the interests of the Muslim masses. There was no 'pre-capitalist' Islamic formation being assimilated by the Europeans; instead there was a slowly developing industrial capitalism that was snuffed out by European colonialism (al-Duri 1969). The colonial *rapprochement de force* implanted itself in the nascent states as the national power broker. With manufacturing or modern-scale economic activity being the springboard to development (Reinert 2008), the fact that there are so many small Islamic states, some only viable as outposts of global capital (the Gulf sheikhdoms were formed by the British East India Company), implies that an industrial structure is unlikely to have, *sui generis*, moulded current political geography.

In spite of nearly half a million people employed by the Ottoman states in various social functions by the mid-nineteenth century, the empire's level of industrial development was lagging behind in comparison to Europe (Gelvin 2004, 80). The few Ottoman experiments that attempted to uncap potential – Mohammed Ali of Egypt and the industrial southern belt of the Ottoman Empire linking Tripoli, Aleppo and Mosul – were extinguished by colonial design (al-Duri 1969). The greater share of Islamic agriculture remained to satisfy subsistence (al-Duri 1969). However, it is not because a social formation has more subsistence farmers than wage workers that it gets defined as pre-capitalist rather than capitalist. Slavery under capitalism was crueller than past forms of slavery, but it was nonetheless capitalist. The issue of whether a formation is capitalist or not does not depend on numbers. The size of the reserve army of labour is irrelevant to the definition of capitalism; capitalism instantiates the reserve army of labour. As an incipient relationship, capital, already in control politically, had already saddled the Islamic labour process with conversions to cash-crop culture by the early nineteenth century.

Piecemeal European infiltration beginning in the nineteenth century was followed by

outright occupation, and, consequently, the conditions of resource usurpation came to be determined almost entirely by the pace of European capital. Consummate colonialism signalled the beginning of the hegemonic articulation of the colonized mode of production: it is colonial articulation imposed by absolute violence. The full wrath of Western colonial practice bore down on the Islamic peasantry. The peasant population, although delinked from capitalist production proper, was subject to immense repression. Lutsky (1969) underscores the broad practice of forced labour and illustrates how bonded Egyptian labour was forced to march in front of British soldiers in World War I so that the enemy may exhaust its ammunition on shovel-wielding peasants before it reached British soldiers.

Little mainstream emphasis is laid on indigenous Islamic development and the fact that by the mid-nineteenth century, textile industries flourished in both the Levant and Egypt, in silk and cotton industries, respectively. Under Mohammad Ali's development project, the industry employed nearly 40 000 wage workers (al-Duri 1969). Then, by the late nineteenth century, European colonialism imposed rules of conduct and trade-liberalization measures that eroded national industry, which subsequently resulted in the first phase of industrial decline. Colonial suppression accentuated an already inherent path of uneven development under capitalism by hindering indigenous industrialization (al-Duri 1969).

By the late 1870s, the Ottoman Empire literally pawned Egypt's tax revenue to Britain, and £1 million in taxes had to be extracted from the Egyptian peasantry to service Ottoman debts to British banks (Lutsky 1969). Farming areas were condemned to poverty in relation to wealthier small enclaves made up of middlemen and compradors. More importantly, colonial forces set the exchange price of the local currency in relation to their own currency at levels that undervalued the output of the dominated country, especially the value of subsistence agriculture in the countryside. Relegating the Muslim world, mostly by violent means, to a repository of material for capital and engaging it through the war industry into a process of value destruction incapacitated any means for self-reproduction of those societies. It was from this particular experience that Anouar Abdel-Malek formulated his concept of the historical surplus value; broadly speaking the value that formed in the centre in relation to the value destroyed or snatched from the Third World (Abdel-Malek 1985). Although in the longer term value chains and value creation demonstrate the organic unity of working classes, the underside of the process in value snatch and value destruction creates what Emmanuel (1972) calls aristocratic nations that maintain a high standard of living by pauperizing the Third World.

THINGIFIED INSTITUTIONS

More recently, a new strand of institutional social science (Acemoglu and Robinson 2012)¹⁰ in the tradition of New Institutional Economics (NIE) undertook an explanation of the global transition to capitalism. To begin with, one may define institutions in

¹⁰ In reference to the work of Daron Acemoglu and James A. Robinson (2012), which was critically assessed by Professor de Vries (2012).

many ways; for the purpose of this chapter I draw on a Marxian definition: institutions are forms of social organization that mediate materially grounded and historically determined social relationships. Capitalist institutions and their ideological set-up came to reflect the relations interred in the commodity as self-expanding value, which could not have come into being before a broader commodity-producing world had come into being. Yet, it is argued that certain immutable qualities of institutions explain contemporaneous as well as past developmental progress, or the lack thereof. As in every concept that springs to prominence in social science, reified – that is, thingified and given a life of their own – institutional accounts are flaunted for ideological reasons. The formal idea of what constitutes an appropriate institution (a noumenon-like form) derived from present-day phenomena is projected on a past in which modern institutions could not possibly have arisen. Every concept exhibits a shifting qualitative meaning in relation to real developing conditions.

NIEs are rooted in the neoclassical method. For the neoclassical school, capital, labour and technology (principal determinants of economic growth) inhabiting a frictionless and symmetrical world left too much of reality out of the picture. Bringing the rest of reality in terms of transaction costs (as per the NIE) into the model helps to reach an equilibrium; but that is a way out from fantasy into absurdity. The transaction costs are the real world, while the algebraic model coming into some steady state is the fiction. The perniciousness of such an approach is that if the market model failed to reach equilibrium, it did so because there were conditions in actuality – namely, all of reality – which were unaccounted for and had caused the system to fail. This is a failure of theory at its inception and before it becomes subjected to interpersonal comparisons (as in theoretical nihilism). Selecting some of the real but distorting conditions that stand in the way of equilibrium and including them as additional variables in a model is theory by convenience. Whatever blocks equilibrium – disorganized property rights, asymmetric information, and any other condition *ad infinitum* – would be priced by sub-markets to reach an ultimate equilibrium.

The forgotten point here is that there is a self-differentiating process within and between social or economic variables; that is to say, they are a product of themselves and they affect each other by qualitative change. As such, this state of contingency a priori omits the possibility of modelling becoming theory. Moreover, the mainstream choice (NIE) of dissecting the social state of affairs by overlooking social contradiction also omits the model as such from serving merely as an illustrative tool. So it is not only that some variables were overlooked and that theory requires their inclusion in a continuous process of falsification to stand on better grounds, or that it is the quantitative relationship of variables to each other that would count as theory; it is in failing to account for the dynamics of history: that is the subject of history (who is doing what by means of intermediated agency), its defining social relationship, which is rudimentary to theoretical construction.

But for the developing world, and particularly the Islamic world, neoclassical constructs cannot conceal the prejudice behind formal models that wipe away all sorts of contradictions when many of them are mired by wars and forms of violent expropriation. There is not even a semblance of bourgeois democracy by which abstract individualism and choice could be entertained in theory. Encroachment wars in East Africa, North Africa, South Asia and East Asia as of the sixteenth century were followed with the

East India Company's actual creation of the small emirates of the Gulf to hedge against piracy in the Arabian Sea (Lutsky 1969). By the eighteenth century, the main reason for which European powers did not dissect the Ottoman Empire was their concern for one another's share of the loot rather than any Ottoman response (Lutsky 1969).

As in yesteryear, there are today, at any given time in and around the vicinity of the weaker Islamic states, US troops patrolling the land, the Fifth and Sixth Fleet cruising the seas, various US-supported military institutions controlling dissent, and the state of Israel, which in the anecdotal words of Henry Kissinger costs the US less than the Sixth Fleet to maintain as a gendarme of the Middle East. As it did in the past, this firepower would enforce any contract, set the terms for trade, exchange and transaction costs, and define rights, including property rights and the rights of people to own their natural resources and use the proceeds to improve their living conditions. The market in these weak formations with its prices and supply and demand is first and foremost a by-product of an immense power differential caused by imperialism. It is the social and political power structure which moulds trade and transaction costs; in this social relationship – that is, imperialism as the realization of capitalism in the periphery – 'supply and demand' would be illusory constructs meant to obscure 'who makes what' in history.

Institutions in the NIE tradition, however, are:

a set of constraints on behaviour in the form of rules and regulations; a set of procedures to detect deviations from the rules and regulations; and, finally, a set of moral, ethical behavioural norms which define the contours that constrain the way in which the rules and regulations are specified and enforcement is carried out. (Srivastava 2004, 3)

When defined as a set of transhistorical rules, all of social reality at any time fits into this framework to some degree. Applied to the Islamic world, one finds that the Islamic formations supported multiple sorts of property rights (Mundy 2010). That property relations are sustained by an undemocratic political system, which allows a minority to gain at the expense of society's welfare, is always the case in a class system. One ought to note that the docility of capitalism is the result of a balance of class power within it; otherwise it would devour itself. As discussed in the section above on 'Development in the Ancient Mashriq', equity since ancient times has assumed better standing in relation to the ruling regime's desire for political stability, the strength of the labouring class and the degree of wealth distribution. Necessarily but not exclusively, this hydraulic-like control mechanism still applies.

It is vacuous to suppose that institutions support irrational property rights as a result of a narrow elite that has organized society for its own benefit at the expense of the vast mass of the people (Acemoglu and Robinson 2010). The 'narrow elite' can only perform its wealth appropriation measures in relation to the power of other social classes. It is the co-determination of the 'narrow elite' with other 'elites', the agency of the transnational elite consortia, which organizes value transfers within and from society and that accounts for types of property. Private property rights, whether irrational (as alleged about the Muslim world) or not, are rights that exclude the majority by minority rule; neoclassically, the justification is attributed to an entrepreneurial minority that takes risks or has rights by entitlement. In line with this stance, an undemocratic political system raises the costs for the majority to organize and impose a different property rights regime,

understood as property rights required for a competitive market economy. In other words, it assumes that the majority organize to exclude themselves from public property (socializing assets), because publicly owned wealth is less market-efficient. Does such a proposition need to be assumed when the articulation of ruling classes that includes international financial capital and imperialism does all it can – in ideological terms as well – to exclude the majority? Each and every concept used in mainstream institutions serves the minority that excludes the majority, or is a hollow ideal without reference to a real process. In all cases it is loaded with ideological bias.

In the Muslim world, the structure of property and taxation was not so straightforward: urban *milk/mulk* versus status of agricultural land, *waqf* versus *shar'i* transmission for the former, changing doctrines and tax practices and articulation to market over the centuries of agricultural land, changing legal status of cultivators, make it impossible to have an easy rule-of-thumb about the structure of property relations in Islam (Mundy and Smith 2007; Mundy 2004). As to democracy and democratic practice as touted by NIEs, the very use of the cliché 'European democracy' when slavery and genocide are carried out by Europe in the periphery define some lives as cheaper than others to justify value extraction by violent force as the principal activity of social relations in capitalist society. European democracy is the gyroscope that steadies an otherwise implosive capital system. The distribution of wealth to European working classes from the proceeds of commercial exploitation reorganizes the social order around warring national identities and colonial plunder. In an organic value transfer mechanism originating in the global South, any form of democratic representation for the vanquished working classes would undermine the rate of capital accumulation; Iraq boasts a European Style Parliament while its more or less egalitarian society has come to exhibit one of the lowest labour shares globally. This thingified institutional discourse is not innocuous; it rereads history from a skewed optic that obscures the necessity of snatch by violent means to justify the continued pillage of the Muslim and Third Worlds.

Thingified institutions in the NIE tradition display no content of institutions as such. The changing objective forces of history and the quasi-monolithic structures into which people are born are discarded from the definition of institution. NIEs also settle on the strongest form of reductionism and determinism at the level of the individual, and the impact of other factors is acknowledged if only to be sidelined in deference to the 'pricing of principle' (Fine and Milonakis 2003). The power of social classes captured in varied institutional practices or imperialist assaults upon the Muslim world counts merely as transaction costs and not as a shaper of historical development. The mainstream discourse therefore stretches the width of institutions – only their organizational form and function, but not their substance – as generalizations spanning the full length of a monotonic history. The peril of overgeneralization is to render a symbol whose corresponding reality is changing into an unchanging universal so that it assumes the same quality across history. States, parliaments, forms of property, production relations and any other institutions arising thereupon cannot share inherent qualities for millennia. The most 'pertinent' of these institutional qualities are trans-historical qualities that would suddenly predispose an entire continent (Europe) into a shift to capitalism because it is, for instance, 'culturally' democratic. The mythology behind this facile argument finds its roots in the absurdity that slave-owning Ancient Greece was democratic and would later become the genus of all future democratic development.

The growth in science, technology, forms of labour organization, new world wealth and means of communication did not come to rest, and their deployment in production is dependent upon class *cum* power relations. It was not an esoteric European institution of democracy that readily became receptive to global changes and commandeered history: it was European armies and battleships. Although Emmanuel (1972) notes that it took centuries (dating back to Rome) of direct plundering to make possible a kind of primitive accumulation on an international scale, it was the Venetian looting and violent expeditions in the Mediterranean, and the later Spanish, Dutch and Portuguese colonization, that had an immediate bearing on capturing sea routes and ports. Europe's relations with the rest of the world have been one long story of acts of piracy, such that when capitalist production relations came to maturity, 'an immense mass of booty had already been accumulated in Europe' (Emmanuel 1972, 358). To dismiss Eastern or Muslim losses at sea and land trade routes across Asia and the Mediterranean as minor departures in world development is to neglect power, control and class from the process of wealth-making.

So-called 'good' institutions *à la* NIE that fit all times and all conditions do not exist. Institutions that serve as thresholds for development arise as instantiations of historically determined social relations. To ignore periodization on the basis of specific laws of development (not universally shared characteristics, because constituent elements can only be similar in quantity), and not particularize the concepts of each historical phase, opens the way to gelatinous explanations that reduce quality to quantity. Different forms of private property prevailed across history, but exchangeable title deeds holding value for individual owners beyond the land's use for subsistence could only have occurred under capitalism. If one were to comply with the language of NIE, the institution of private property as such would not have appeared outside the prevalence of exchange value. One ought to note that the falsity of this quantifying way of reasoning, such as abstracting from particular institutions of property, governance and trade rules that rise above the specificity of social time, had been critiqued as a false logic at around two centuries ago:

If it be the office of comparison to reduce existing differences to Identity, the science which most perfectly fulfils that end is mathematics. The reason of that is that quantitative difference is only the difference which is quite external . . . If quantity is not reached through the action of thought, but taken uncritically from our generalized image of it, we are liable to exaggerate the range of its validity, or even to raise it to the height of an absolute category. (Hegel 1831)

The underside of quantification as overgeneralization is that it leads to falsification of fact. To prove the theory one must distort the fact. Islamic land ownership and forms of property were complex and varied in relation to the political measures taken by the central authorities (Cahen 1982). The holdings of wealth were tied to the politics of the central authority and rarely steadied for Islamic private or *waqf* property and inheritance rules so that these institutions could carve a path of their own. The notion that all property was Allah's masked the point that the caliph was Allah's agent in matters of real estate. Fiefs changed hands often enough not to be bequeathed in smaller divided parcels to a third generation (Taqoush 2002). The division of assets does not shape wealth accumulation in scale economies when capitalism takes root. The multifarious Islamic *fiqh* (jurisprudence) could have easily extended *sharaka* (partnership) into legal corporatism,

given the adaptability of Islam. However, late nineteenth-century corporations, unlike recent ones in which personal liability is waived, were a form of *sharaka* in which owners bore personal responsibility for business; a replica of Islamic *sharaka*.

Falsifications of Islamic history hinge on the absurd in order to shift the blame for underdevelopment onto the abstract idea of Islam itself rather than the belligerence of European imperialism. Islamic inheritance rules as opposed to European primogeniture is said to divide initial wealth holdings into smaller portions, thus reducing the wealth pie and the scope for merchant capital development (Kuran 2011). A blanket proposition as such misses the hard reality of the high degree of wealth inequality under feudal despotism, Islamic or otherwise, and the fact that for most of Islamic history right to tribute was more by allegiance than inheritance (al-Duri 1969; Taqoush 2002). Anecdotally – and one can only treat such remarks in this manner – had there been population growth with redivision of assets by inheritance, the Islamic world could have been a haven of equity. Laws are subsets of social relationships, and despotism (the feudal relationship) is the revocation of laws. Under the capitalist social relationship, laws promoting monopolies in trade and the militarization of merchant capital growth boosted individual wealth, but the growth in wealth itself required new technological ideas that were often cheap to realize.

Institutions organizing particular social relationships are interrelated subsets of the broader, more determining relationships that guide development. ‘The principle “the truth is the whole” – to use an expression from Hegel – carries with it, in turn, the incapable necessity of refusing to accept as a datum or to treat as immune from analysis, any single part of the whole’ (Baran 1961). The transformation of merchant capital into productive capital grew by growing demand from the world market, control of peripheral resources and ownership of trading routes and posts. An institution such as the corporation or inheritance laws cannot prepare society to enter into a historical phase whose time has not yet come. The Muslim world lost the demand for its merchant capital products – its export platform vanished. No supply of good institutions could have made it capitalist.

Social relationships under capitalism became subsets of the market order upon which all of livelihood would soon come to depend. That market space in which merchant capital operated was often violent and structured by power hierarchies. In the debate between Greif and Edwards, the latter discounts docile commerce as a culture for trade based on the reputation and traditions that enforced contracts, as Greif (1993) argues, and posits that it was the might of the law and the potential threat of force that brokered departures from tacit market agreements (Edwards and Ogilvie 2008). Forms of property and wealth holdings also became subsets of the market diktat, which more often than not changed hands by outright dispossession rather than the rules of legal institutions. The same market forces that prompted genocide in Australia, Africa and the Americas also required accumulation by grab and input-cost reduction wars against the Islamic world. As early as the twelfth century, the rise of European naval supremacy pushed Jewish and Islamic traders out of the Western Mediterranean (Edwards and Ogilvie 2008).

At a further remove, the civilization of the Silk Road, a form of globalization within available technical and communication means of the time – by land and several sea routes, sea routes being less costly and far more important to capitalism (cf. Frank 1992) – exhibited a steady and narrow line of traded goods: silk, pepper, spices, drugs, porcelain, glass and pearls from the Far East. The many interruptions to the Silk Road

between the second century BC and the late seventeenth century brought no significant crisis to the population of the East, whose subsistence was suffused (Frank 1998; Taqoush 2002). During trade with faraway China, Europe's balance remained in deficit in this respect until as late as the 1820s, and precious metals flowed to the Far East (Braudel 1992). By the sixteenth century, Europe was ahead of the rest of the world, and the standard of living of the average citizen was high enough to sustain luxury imports from China (Emmanuel 1972).

However, this was not an epoch where the suspension of trade would lead to famine. Social reproduction dependent on trade is what constitutes the sociological difference between Silk Road-type trade and the latter phases of trade in essential commodities under capitalism (as around the time of the Corn Laws). Once the embryonic relationship of capital begins to set the pace of value creation through technological innovation, socialization of labour (uprooting of peasants) and wars of encroachment, the outdated modes of production become material for capital held in animated suspension. As pre-capitalist formations fall within the reach of European navies, it is no longer institutional quality that hinders their indigenous growth into capitalism, but their loss of autonomy. Their institutions as organizational forms of their classes are co-determined by their interrelations with the more powerful social class of imperialism and its institutions.

Religion rarely stood against the advancement of commerce. Islamic restrictions on the development of merchant capital were minimal: constraints on commerce contradicted the values of the Prophet. Injunctions against usury, the alleged Achilles heel of Islamic development, did not impede trade (Turner 1993; Rodinson 1978). Already, usury (*riba*) was widely practised in Mecca, for in order to participate in the profitable caravan trade, many Meccans who only had modest incomes had to resort to usurers (Belayev 1969). Also, the prohibition of usury was not common to all schools of Sharia. The Maliki School does not distinguish between buying and selling (as in trading goods) and usury (al-Baghdadi 1991). Where usury was prohibited, the Ruses '*Hyal*', one of which is to embed the interest rate as an extra premium in a sale transaction similar to money laundering today, covered the cost of lending while appearing as a normal sale (Rodinson 1978 [1966]). A number of scholars have concluded that the rigidity of Islamic law and its prohibition of usury never really interfered with commerce (Turner 1978). It was not Islamic ideologies that governed; they merely expounded God's opinion (Rodinson 1978 [1966], 73).

Max Weber's point about the Islamic dependency on the feudal warrior ethics inhibiting capitalism is factually wrong (Turner 1993). Islam was urban, commercial and literate (Turner 1993, 53). At the height of Islamic-European cultural exchange, basic Islamic terms were conveniently translated into European ones without much respect for etymology: Ibn Khaldun's *umran* gradually turned into Guizot's 'civilization'; the *maslaha* of the Maliki jurists and Ibn Taymiyya into the 'utility' of John Stuart Mill; the *ijma* of Islamic jurisprudence into the 'public opinion' of democratic theory; all of which are institutions that were supposedly absent in the Islamic world (Hourani 1962).

Current scholarship flaunts only Ibn Khaldun (1332–1406), as if Islamic materialist thought was a single aberration attendant on his *Prolegomena*. The theoretical ferment in Islamic philosophy dates back to several centuries earlier. The treatise on faith being founded upon reason of the Mu'tazila and later the avowed atheism of some of the Brethren of Purity (tenth century) led to an understanding of phenomena as conditioned

by material circumstance. The materialist philosophical debate peaked in Fatimid/Abbasid times (the eleventh century) with Muslim *zindiqs* proclaiming their atheism (Mroueh 2008 [1978]). Apostates and godless folk were rarely, if ever, punished by death; then as now, punishment by death related to maintaining regime stability rather than adherence to faith.

The tenth-century debate on reign by reason versus reign by predestination mirrored the Fatimid desire to gain legitimacy, a status enjoyed by the Abbasid Caliphate of Baghdad. In a manner similar to the irrevocability/revocability of the monarch in the English Civil War, rule by reason as opposed to rule by divine predestination would posit that there were reasonable grounds for the caliph's absolute powers to be retracted and maintained symbolically. Philosophical debates from the tenth century onward assumed materialist overtones and ushered in a global era of humanism common to the Mediterranean basin (Makdisi 1990).¹¹

Weber's view that Islam did not know the communal institution or the corporation as a juridical entity but as a form of artisanal collection is due to his lack of knowledge of Islamic history (Davis 1957; Turner 1978, 2002). Turner (1978) posits that Weber's positions about Islam were sweeping generalizations; especially the point that the Islamic world was taxed arbitrarily by troops that paralysed the moneyed economy and did not respect private property. The interface between types of social or legal arrangements and development outcomes is dependent on the articulation of classes and their corresponding power. It should have been objective scientific practice for Weber (Weber was one of the few who thought that objective social science was possible) to acknowledge that it was European militarization of the seas and colonial savagery that underpinned capitalism. Turner's critique of Weber is apt; however, his classification of Islamic military routs as just one reason among many for the lagging of Islamic societies deflects the determinacy of power and control from social relationships. In reference to this method of muddling historical reasons in social history without specifying the determining relationship, Davis (1957) considers approaches of a similar nature as evasive academic manoeuvres whose purpose is not to challenge dominant vested interests.

There was no shortage of flexibility in Islamic institutional development. The second orthodox caliph undertook a census (*diwan* in Arabic, from which *douane*, 'customs', in French originates) to redistribute resources more evenly and solidify the home front in the Hijaz (Hitti 1970). Since AD 800, Ibadism, the principal sect in Oman, has elected its Imam (al-Mouharami 2004). The Omanis traded across sea routes to China and the Indian Ocean and were the principal traders off the coast of East Africa. Electing chiefs was general practice throughout the island of Java (Anderson 2010, 27). But capitalism was not to emerge from East Africa, the Indian Ocean or anything related to more participatory forms of politics. When capitalism began to take root, the Portuguese in the sixteenth century had already occupied Muscat and displaced the Arabs from much of

¹¹ In conveying the linkages of Islamic heritage to Europe, Grollenberg (1980), standing in Trafalgar Square in London, reminds his readers that 'the name of the square was Arab; that the banking cheques were named from Arabic, the numbers on them Arabic; the drains had been developed in Baghdad; the key stars are called by Arab astronomers; the techniques of navigation used by Nelson to Trafalgar were first codified by Arab navigators; Nelson's title, Admiral, is an Arabic word; the water flowing is pure because of a science of chemistry first properly organized by Arabs'.

the southern seas. Islamic history in terms of civil liberties mirrors varied social conditions that prevailed at different times and regions. To attribute capitalism to European cultural superiority, stability of political rule or more pluralistic forms of political decision-making could easily be countered by just as many examples from the East. However, European 'voyages of discovery', as imperially sponsored pillaging expeditions, created the wealth that prompted rising production of commodities coinciding with times of progress in the development of productive forces (the dialectical collision of coincidence with necessity). In contrast to the European side, the demand for Muslim goods did not pick up and, accordingly, institutions could neither prepare for nor adapt to capitalist conditions prompted by changes incurred by merchant capital.¹²

Recalling: trade routes may have been safer under the Mongols, but their sacking of principal trading centres reduced capacity and trade volume (Abu-Lughod 1989). More importantly, it was the loss of the sea-trading posts that really dealt a heavy blow to Islamic merchant capital (sea routes were cheaper and less risky). That said, the dominant relationship welding together divine political and economic rights had no external stimuli to come apart. In Europe, by the sixteenth century, the spectrum of commodities being exchanged expanded. The already established pattern of grabbing resources abroad picked up speed to meet the competitive pressure from an increasingly moneyed economy. By the seventeenth century, the idea of credit expansion to cover merchant capital's transition to industrial capital morphed warring companies into warring states. A system of public credit – that is, of national debts – whose origin we can discover in Genoa and Venice as early as the Middle Ages, took possession of Europe generally during the manufacturing period, and the colonial system with its maritime trade and commercial wars served as a forcing-house for it (Marx 1867). Extracting surplus from rising productivity via commodity exchange brokered by the medium of prices became the determining feature that restructured European social relations and market institutions. The underpriced value of slavery and colonial booty was foundational to the overpriced commodities circulating at the higher end of the value chain.

In the various moments comprising the totality of early capitalism, it is not scant money supply in its metallic form that may limit the transition to a moneyed economy; exchange mediating the contradiction between use-value and value may assume a universal form in metallic and non-metallic money forms. If anything, gold and silver inflation in the sixteenth century did not place Spain before the Dutch and the English in the race to industrialization. The issue of metallic-money quantities should not have been a hurdle to Islamic expansion either. However, the line of essential commodities (as in textiles) being produced in Europe and piling up for exchange had become the blueprint of a sociologically new phase that demarcates capitalism from its predecessors. The commodity itself became the genome of capitalism and capital as self-expanding value required value-forming relations that involve extirpation of the peasantry, piracy and expropriation of the direct producers before production proceeds. Every particular

¹² In spite of the significant size of some medieval Islamic urban centres, Islamic merchant capital did not turn artisanry into an institution redefined by a technical division of labour and wage labour. The reproduction of the merchant class did not require rising productivity to meet rising trade. There prevailed a steadiness, up to the twelfth century, and then a decline afterward in the underlying economic life such that the grounds for this transformation did not come about.

incident of merchant capital exchange finds in state-sponsored credit expansion and global pricing its general condition. There is no longer a particular event of usury confined only to the growth of luxury-merchant capital; the whole economy is moneyed and expands by credit: 'pre-capitalist usury exploits a given mode of production and does not create it, as does credit expansion under capitalism, but is only related to it outwardly' (Marx 1984, Ch. 36).

The macroeconomy subverts particular exchanges, and its credit expansion also expands the grounds upon which merchant trade grows into forms of capitalist production. There is only a partial theory of capitalist development if one overlooks the iterative process of particular trade instances transmuting into a holistic condition of trade. Not only is a specific line of commodities traded for money; so are all commodities, and in particular labour power. Fringe-trade deals become sublated (negated and preserved simultaneously), and all commodities trade, underwritten by credit, marks the new phenomenon of a capitalist society. The modern illustration of growth in the general condition is best illustrated with the US Federal Reserve interest rate hike, which could trigger convulsions in food prices across the globe, at times contributing to increasing hunger. In this unfolding and novel condition, it is flawed to presume that there could have been 'good institutions' identified with modern capitalist social relations, which could have been transplanted back into an era into which capitalism has not yet arrived, and then to conclude that the past Islamic world did not develop because it did not have good institutions like our modern ones. The reason for confounding past and present concepts is to downplay the role of European imperialism, which continues to represent the decisive historical fact that accounts for European wealth.

CLOSING COMMENTS

Changes in the course of development are the outcome of impersonal and objective forces of history. Islamic history is often told like a fairy tale in which spirits remained enslaved and villains reversed the course of progress. The world according to the mainstream discourse is fragmented into various institutions, capturing specific social relations such that when they acquire certain formal qualities, developmental progress occurs. History is not a set of elements related or unrelated to each other at different intervals in time. For Hegel, history was the development of spirit in time. For Marx, it is the process of self-differentiating material relationships in their state of becoming. Classes, in their acts of self-reproduction, are the foremost social relationships. Classes expand by peaceful and warring means. Falling populations as of 1250, the Mongol and Crusade invasions, and the assault of Europe on trading posts across the East, extinguished what was left of the trade platforms and the power of the old Islamic world. The received literature underplays the primacy of this loss of power as a result of successive military routs.

The hold of the dominant ideology cannot bear the thought of a metamorphosis in the Islamic world on the basis of its own values. Genocide, slave trade and wars of aggression appear as mere outlying statistical points that should not affect sound institutional development. The putative perception of Islamic social structures is a selection of irrelevant facts that constitute a false concreteness. The comparative evolutionary approach of earmarking similarities or departures between Islamic and European formations biases

the argument either way, depending on the selection of facts. The facts one selects or the different institutional shapes, whatever they are, may be interrelated and apart simultaneously, but still they remain an outcome of a labour of history in which the law, the dynamic of movement or the general (universal) is not the similitude of facts in phenomenon. The general is the contradiction in the social classes that necessarily but not exclusively regenerates the facts in some sort of similitude. The mainstream avoids mention of the contradiction of social classes. At around 1500, the breaking point in the historical development between East and West, rising demands on merchant capital activity were changing the old conditions that feudalism had imposed on European society in the past. This pressure to change the old conditions as a result of significant growth in merchant capital is what occurred in Europe and did not occur in the Islamic world.

Capitalist accumulation is principally a process of expropriation of the direct producer in which institutions mediate historically specific social contradictions. Aggression, followed by the defeat of Islamic formations, marks the history of the Islamic world. To date, wars of encroachment expropriate Muslim working peoples *en masse* of their resources by stripping their states of their sovereignty. Just as Egypt was de-industrialized when the British invaded in the late nineteenth century, so Iraq was bombed into oblivion by the late twentieth century as it tried to industrialize using oil revenues. With the exception of the few vassal states that are subordinate partners of the North Atlantic Treaty Organization (NATO), Islamic states constitute the poorest, most war-ridden class of countries on the globe. Accumulation in the Islamic world remains centred on the export of raw material, and in particular oil. And also because war for the sake of war has come to be relevant to the global economy, Islamic states, by their very poverty and disarticulation, serve as fertile grounds for continuous conflict. Moreover, given capital's ideological hegemony, the politics and economics of modern Islam are both sponsored by and a by-product of colonial assault. One ought to restate the crucial point made by Rodinson (1978 [1966]), which is that because of the wide latitude in the interpretation of the social agenda in Islam, Islamic ideology cannot serve as a rallying point for progress.

Islamic states' mode of integration with the global economy remains conditioned by the presence of immense US and NATO firepower. Wars of encroachment and the hiring of immense numbers of labourers as war soldiers employing machinery and technology to extirpate and grab value from the Islamic world also generate high value-added productivity, just like the production of cars in a factory. The imperialist wars engage labour in the opposing nations that act as living labour reproducing services and commodities and, literally, as dead labour, for obvious reasons. These wars reassert the positions of aristocratic nations, prop up their high wages and bolster unequal exchange; here I am using a permutation of Emmanuel's (1972) vision. Conversely, imperialist wars pin the productivity of the Muslim world and its wages to its medieval values, as they destroy national infrastructures and reduce its power position. Poor developmental showings are better understood as a result of political declassing rather than religious precepts (Rodinson 1978 [1966]). Islamic history must be read from a standpoint of colonial social relations, involving economic bondage and devalorization, which have led to catastrophic conditions. Collecting and cataloguing cultural differences with the West does neither East nor West justice, as it overlooks the fullness and interrelatedness of social life. To build a case against the Muslims world's underperformance as a market system on the basis of some innate fault in Islamic culture has nothing to do with any reading

of history, and everything to do with justifying present and forthcoming imperialist assaults.

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9. Unity and diversity in the Ottoman school of national economy: a reappraisal of Ziya Gökalp and Ethem Nejat

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INTRODUCTION

Friedrich List (1789–1846) was an autodidactic German economist known for his views in favor of economic nationalism in general and the protection of infant industries in particular. Posthumously he has been recognized as the ‘great-great-grandfather of today’s development theorists’ (Senghaas 1991, 451). He lived in Germany, France and the United States at various phases of his short but stormy career (Daastøl, Chapter 4 in this volume). He was an ardent reformer committed to the cause of a German customs union. He was also an advocate of railways for integrating the national economic space. List was no academic but a policy-maker who shaped ‘informed public opinion’ (Tribe 2008, 1–2) with his ‘deliberately simple and engaging’ style (Daastøl, Chapter 4 in this volume). His book *The National System of Political Economy* (1841) had far-reaching repercussions worldwide. So much so that his specter chased that of Adam Smith as political economy spread outwards from its original domain.

The late Ottoman Empire was no exception to this trend. Especially after the Young Turk Revolution of 1908, the Ottoman school of economic thought that came to be known as ‘*Milli İktisat*’ (National Economy) spread rapidly in academic as well as intellectual circles so much so as to become the official doctrine during World War I. Hence this approach owed its unity to the Listian source as well as the world economic circumstances that imprisoned the Ottoman Empire and legitimized the search for an alternative strategy for economic development. List’s recipe for economic development was designed for the relatively less-developed Germany (yet to be united) as a strategy for catching up with Britain. Situated in the periphery of Europe, Ottoman intellectuals and academics also sought inspiration in List’s work in order to come up with an articulate alternative economic program to that of classical *laissez-faire* liberalism. The appeal of the program notwithstanding, it is nevertheless clear that the Ottoman Empire was no Germany, and hence the program could not be taken as it was and readily applied. Reinterpretation and improvisation were essential. This is where the diversity of the Ottoman School of National Economy emerged from. In this chapter, we dwell on two rival interpretations of the National Economy thesis manifest in the works of Ziya Gökalp (1876–1924) and Ethem Nejat (1887–1921). Like List, neither was an economist by training per se. Like List, they targeted their writings to the nascent informed public opinion in the Ottoman Empire. Both exerted important influence at a time when theory and policy were wide open to improvisation. Ultimately their legacy was transferred to the Turkish Republic

founded in 1923, and some of the Republican policies and institutional experimentations reflected this heritage. Ziya Gökalp's version represents the mainstream interpretation loyal to List's more widely accepted message. The ultimate goal of National Economy is to deploy economic development by way of industrialization as a social force to transform and modernize society. Here the emphasis given to the primacy of heavy industry is of paramount importance, and Gökalp came to this position only in his later writings despite the fact that heavy industry sounded like science-fiction at a time when the Ottoman economy was at best characterized by the marginal presence of a few light industries basically concentrated in Istanbul and Izmir, according to the official statistics of 1913 and 1915 (Ökçün 1984, 14–15). Ethem Nejat, on the other hand, was equally committed to the idea of a National Economy yet took the existing economic circumstances into consideration. In his view, the setting-up of industry could not be a realistic goal. Hence he modified the program substantially. A combined development of agriculture and commerce was badly needed with practical education as the critical input to this effect. We emphasize that Ethem Nejat shared, just as much as Gökalp, List's commitment to progress. However, in Ethem Nejat's mind, education by increasing human capital could advance commercial agriculture and act as a developmental pivot. A revisit to this debate is also of relevance for understanding how List's work was received in the European periphery and how the local circumstances helped reshape the original message by cultivating variations from within.

BIOGRAPHIES AT A CROSSROADS

Ziya Gökalp was born in 1876 and brought up in Diyarbakır as an Ottomanist, likely with Kurdish ethnic origins, and his first article was published when he was only 16, in a newspaper of the name *İstikbal* (Future), put out in Geneva, Switzerland (Tütengil 1964, 59–60). After the Young Turk Revolution, he was chosen for the central committee of the Committee of Union and Progress (CUP). Between 1911 and 1912, just before the Balkan Wars, he taught sociology¹ in a lycée (*Sultani*) in Salonica, the most important Ottoman cosmopolitan port city in the region, besides being the hotbed of Balkan Renaissance (Ülken 2007, xiv). There, he was deeply affected by the journal *Genç Kalemler* (New Pens), put out by the young storywriter Ömer Seyfettin and his friends, advocating the progress of Turkish national language at the expense of Ottoman Turkish, which consisted of an unintelligible artificial mix of Turkish, Persian and Arabic. The winds of linguistic nationalism, combined with the ethnic hostilities in the war-ridden Balkans, helped to transform Gökalp from an Ottomanist into a Turkish nationalist. It was there and then that he took the uncommon 'Gökalp' with its nationalistic overtones as his second name in 1911 (Tanyu 1981, 66). He returned to Istanbul and played an active role in advancing the nationalist cause. In 1912 he was elected to the Ottoman parliament and offered the post of Minister of Education, which he declined, only to do so again in 1913. He chose instead to become an instructor of sociology at the *Darülfünun*

¹ At first, he was not enthusiastic about teaching sociology but was convinced to do so by a colleague who agreed to teach psychology in return (Tanyu 1981, 57–58).

(traditional University of Istanbul). He was active in reforming and advancing the autonomy of this traditional school of higher education. He set up the Institute of Sociology in 1914. He also initiated the Economics Association (*İktisat Derneği*) – where he gave numerous lectures – together with his colleague Yusuf Kemal Bey, the professor of economics (Heyd 1980, 28). Being an influential member of the CUP, Gökalg was forced to exile in Malta (1919–1921) after the armistice following World War I. Upon his return to Istanbul on 19 May 1921, he was not reinstated to his post at the *Darülfünun*. He moved to Ankara, where he gave support to the national liberation movement that was then on the brink of proclaiming a republic. He died in 1924 in Istanbul. He had earned great respect as the father of Turkish nationalism.

Gökalg was not only the father of Turkish nationalism but has also been characterized as the founder of Turkish sociology (Ülken 1979, 304). The courses he taught at the *Darülfünun* laid the foundations for Turkish sociology. He wrote extensively on theory as well as its applications to Turkish history and society. If there evolved a strong school of sociology at Istanbul University, this was made possible by his work, mentorship and influence. It should be emphasized here that Gökalg has been baptized as the father of sociology only posthumously. He conceived his work as covering a wide range of social sciences, as was the case for many of his contemporaries not only in Turkey but also in Europe. The divisions among the social sciences were not as strongly drawn before World War I as we so often readily assume. Sociology developed from within political economy and remained in close dialogue with it well into the 1920s. During the very same epoch, social sciences had not yet been fully differentiated. Not only Durkheim and Weber, but also Vilfredo Pareto, Joseph Schumpeter, François Simiand and Thorstein Veblen shared a discursive domain that encompassed political economy as well as sociology. A contemporary study of this gray area has retrospectively chosen to characterize it as ‘economic sociology’ (Gislain and Steiner 1995). It should be no surprise that Gökalg’s contribution to the development of political economy in the late Ottoman Empire is as important as his role in the formative epoch of sociology.

Gökalg was well acquainted with the works of major names in European philosophy and social sciences (Parla 1992, 51; Ülken 1979, 304). It was, however, Emile Durkheim whose influence was strongest. Those who consider Gökalg first and foremost a sociologist also acknowledge that had it not been for the Durkheim effect, he may not have been that. Thus, the Durkheim effect tilted Gökalg towards becoming more of a sociologist. Even so, Gökalg developed an original interpretation of Durkheimian sociology that would befit the realities of the Ottoman Empire and Turkish society and history (Sağlam 2008, 181). The difference of the Ottoman/Turkish case from France was first and foremost a difference of economic development. As Gökalg gained increasing awareness of this, he became more and more of a political economist attentive to the questions of economic development. If we remind ourselves of his involvement in the CUP, we will understand why this was not only an intellectual interest but also motivated by immediate policy concerns. In short, circumstances forced Gökalg to focus more and more on political economy. At a time when the European Durkheim (and later Max Weber) moved further from the broader domain of political economy towards what would retrospectively crystallize as sociology, Gökalg traversed the same path in reverse. Had he not been a late Ottoman intellectual, he may have opted for sociology in light of his purely intellectual interests. It was the historical context that made all the difference.

The Ottoman Empire was no exception to the fact that the lingua franca of academics in the nineteenth century was French. Ottoman intellectuals came to know about developments in philosophy and social sciences through French sources. Even political economy, otherwise being a British originality, permeated the Ottoman environment via French intermediation. Like all Ottomans aspiring to be intellectual, Gökalp learned French. His orientation towards Durkheim was a consequence of this linguistic choice. Having once entered this path, however, Gökalp resisted being overtaken by Durkheim. He deliberately differentiated his thought. Secondly, Gökalp reoriented his thought from sociology to political economy at a time when the axis of sociology in Europe shifted from France to Germany, as Durkheim was being eclipsed by Max Weber. Gökalp followed this trend only halfway. Despite his linguistic proclivity, Gökalp's thought escaped the French orbit and came under the influence of German thought at large. Rather than turning to Weber, however, Gökalp tuned himself to Listian political economy. The pulling effect of political economy on Gökalp was so strong as to bend his intellectual trajectory despite the fact that he did not know German. What mattered most was that German social science and economic development were becoming paradigmatic worldwide, and moreover, the Ottoman Empire was entering into a historic alliance with Imperial Germany. Gökalp's writings show how deeply he was entrenched in a pro-German intellectual discourse without actually knowing German and reading the original sources. List had by then become commonplace knowledge among the Ottoman-Turkish intellectuals with a critical bent. Gökalp was carried with the tide so much so as to become the major transmission belt for the historical legacy of the Ottoman school of National Economy to the first generation of Turkish intellectuals under the Republic of Turkey, founded in 1923.

Ethem Nejat was born in İstanbul in 1887 and learnt reading and writing from his mother, who was of Circassian descent. He graduated from the *Ticaret Mekteb-i Ali* (Higher School of Commerce). In the Hamidian era, he became a journalist and published regularly in the Ottoman *Ziraat ve Ticaret Gazetesi* (Gazette of Agriculture and Commerce). Because of his contacts with the Young Turks, he had to flee from his country. Unlike his peers seeking refuge in Paris, however, he chose to head for New York around 1907. Prior to the proclamation of the constitution in 1908, however, he had shifted to France. We know he had been to Marseilles and Paris. From the *Gare de l'Est* in Paris he left for İstanbul about two months after the Young Turk Revolution. He was appointed headmaster to the *Hususi İdadi* at Alasonya, where he served from 1909 to 1910 and met his future long-time colleague Ferid Bey. The two friends were then appointed to the teachers' college (*Darülmüallimin*) in Manastır, where Ethem Nejat introduced agricultural and commercial instruction and started putting out a journal, *Terbiyevi Yeni Fikir* (Educational New Idea). When the Balkan Wars broke out and Serbs occupied Manastır, he was taken as prisoner of war.

The traumatic effect of the Balkan Wars left its imprint on his mind just as the Circassian War had on his mother's. Like Ziya Gökalp, he was also transformed from an Ottomanist into a Turkish nationalist. In 1911, he acted as the representative in Manastır of the journal *Türk Yurdu* (Turkish Homeland). He was inspired by the activities of Bulgarian nationalists in developing his notion of Turkism which he defined as seeking progress in the economic and cultural realm, as a nation in solidarity within itself, as well as with the other Turkic communities in the world (Erkek 2009, 327). As of 1912, Ethem Nejat became a staunch Turkish nationalist and a Pan-Turkist, and he remained so until

1918, when he arrived in Germany. He readily joined the activities of Turkish nationalist hotbeds such as *Türk Ocağı* (House of the Turks) founded in 1912 at a meeting in which Ziya Gökalp took part as a representative of the ruling Party of Union and Progress and its subsidiary *Türk Gücü* (Might of the Turks) in 1913. Ethem Nejat was first to visit the office of *Türk Gücü*, soon to be followed by leading comrades of the cause such as Yusuf Akçura and Ziya Gökalp. The objective of this organization was to increase the physical strength of the younger population by training, including setting up a network of boy scouts, to be followed by girl scouts.

Ethem Nejat was first and foremost an authority on education. He held a comprehensive concept of education that comprised the ensemble of teaching- and learning-related activities.² More specifically, he explored and introduced to the reading public alternative ways of education in general, and schooling in particular. For example, he was impressed by the *Landerziehungsheime* school of Dr Leitz, from whom he also picked up the idea of training specialized village teachers, an idea that was put into effect after the proclamation of Republic of Turkey by the practice of *Köy Muallim Mektepleri* (Village Teacher Schools) and *Köy Eğitim Yurtları* (Village Education Boarding Schools) (Akyüz 1991; Ethem Nejat 1913b). He advocated the inclusion of practical training into the curriculum, by way of which handicrafts, agriculture and husbandry could be improved (Ethem Nejat 1915, 6–7). Instead of traditional top-down teaching further strengthened by the adoption of the French model for education, he opted for experimentation and interactive learning with a viable bottom-up dimension attentive to Anglo-American and German sensitivities (Ethem Nejat 1913d, 255). He advocated assigning a day per week to outdoor exploration as part of the instructional program for elementary schools; a goal ultimately put into effect by educational reform which reserved Tuesday afternoons for outdoor activities (Erkek 2009, 481). Moreover, Ethem Nejat was among the first to recognize the usefulness of play as a way of learning and developing an enterprising spirit. In so doing, he contrasted the Sorbonne University in Paris with the universities of Oxford and Cambridge in England and Columbia University and the University of Chicago in the United States (Erkek 2009, 484). Not surprisingly, he was also an active introducer and promoter of physical education to the Ottoman scene, who believed in the relative superiority of Swedish gymnastics (*ibid.*, 496–497, 503). He gave special importance to introducing kindergartens that would help to shape the character of children in a way suited for enterprising self-interested individualism (*ibid.*, 516). In addition, he observed the dire need for educating women as teachers for this purpose in specialized schools, a project officially endorsed in 1914 (*ibid.*, 517). He was also well aware of novel practices in latecomers to development as disparate as Germany and Japan in the field of popular elementary education, and did not hesitate to draw lessons from them as early as 1910 (Ethem Nejat 1910a). Last but not least, he proposed that students be sent to Europe for education in agriculture and trade.

² This would approximate the German *Bildung* as a foundation for the development of national identity by way of self-cultivation and consciousness-raising (Bruford 1975). This organic model of education as growth in a spiritual as well as practical sense exerted worldwide influence and found receptive ground in John Dewey's pragmatic philosophy, who was also invited to Turkey for advice during the early Republic. His ideas concerning the civilizing of village life were relevant for *Turkish Köy Enstitüleri* (Village Institutes) to which Ethem Nejat also posthumously contributed (Erkek 2009, 532, 537).

Given his strong credentials in innovative education, in September 1913, Ethem Nejat was assigned headmaster to the teachers' college in Bursa. He transformed this college from a traditional school into a modern one within a year. In 1914 he was shifted to İzmir, where he continued to reform education. Upon the request of Mahmud Celal Bey,³ he prepared a plan for educational reform. When World War I broke out, he volunteered to fight at Gallipoli together with some 60 of his students. He was transferred to Eskişehir in 1915, where he set up the *Turan Numune Mektebi* (Exemplary School of Turan), which moved to its new building in 1916, and its nationalistic name was well received. Ethem Nejat also set up a national library (*Milli Kütüphane*) in Eskişehir, modeled after the one he had seen in İzmir. After a few interim appointments, he was moved to İstanbul, where he joined the translation office because of his knowledge of English, French and German. In 1918, he was sent to Germany by the Ministry of Education upon the endorsement of *Türk Ocağı*.

He arrived in Berlin in 1918. He was influenced by the Spartakist movement and shifted to the revolutionary left. He returned by boat, the *Akdeniz*, to İstanbul on 19 May 1919, the very same day that Mustafa Kemal departed for Samsun on the boat *Bandırma* to launch his campaign for national liberation. During the armistice, he fled from Samsun on the Black Sea coast to Soviet Russia. In 1921, he was active as the delegate for Eskişehir and Ankara in the congress of Turkish communists summoned in Bakü. He travelled to Kars and then to Trabzon while trying as the secretary-general to transplant the Turkish Communist Party to Anatolia. He was among the 15 people who were murdered off the coast of Trabzon in January 1921 at a time when the national liberation struggle in Turkey was picking up momentum. The circumstances surrounding the murder of Ethem Nejat and his comrades remain obscure. It is quite plausible that had they been able to reach Ankara, the seat of the provisional government, they would have given support to the nationalist cause, and Ethem Nejat might very likely have served at some point as the Minister of Education (Tunçay 2005, 35). Be that as it may, what concerns us here are his activities as an uncompromising nationalist that converged with the career of Ziya Gökalp during the Constitutional era of the Ottoman Empire, prior to its defeat, occupation and ultimate dismemberment.

FRIEDRICH LIST'S LEGACY AS TRANSMITTED BY ZIYA GÖKALP

Although Gökalp's economic thought contains elements of French solidarism and Durkheim's work (Sağlam 2008, 206), the significant influence that characterizes it, that is the idea of National Economy, comes from List, who actually termed it the 'National System of Political Economy'. At a time when the German Historical School was not yet born, List had elaborated a critique of Smithian economics in general and the Ricardian doctrine of comparative advantage in particular. According to List, the role of countries in international trade was not dictated by geographical circumstances and natural factor

³ Mahmud Celal Bayar later served as minister, Prime Minister and the third President of the Republic of Turkey.

endowments but could be altered by economic policies. International trade based on comparative advantage could only be beneficial for all parties concerned if and only if all parties were at a comparable economic level. In List's view, British political economy and its policy prescriptions, far from being universal self-evident truths, were in fact dependent upon historical circumstances. List drew an important lesson from history in the light of which he ranked some countries of the world he lived in:

Finally history teaches us how nations which have been endowed by Nature with all resources which are requisite for the attainment of the highest grade of wealth and power, may and must – without on that account forfeiting the end in view – modify their systems according to the measure of their own progress: in the first stage, adopting free trade with more advanced nations as a means of raising themselves from a state of barbarism, and of making advances in agriculture; in the second stage, promoting the growth of manufactures, fisheries, navigation, and foreign trade by means of commercial restrictions; and in the last stage, after reaching the highest degree of wealth and power, by gradually reverting to the principle of free trade and unrestricted competition in the home as well as in foreign markets, that so their agriculturists, manufacturers, and merchants may be preserved from indolence, and stimulated to retain the supremacy which they have acquired. In the first stage, we see Spain, Portugal, and the Kingdom of Naples; in the second, Germany and the United States of North America; France apparently stands close upon the boundary line of the last stage; but Great Britain alone at the present time has actually reached it. (List 1966 [1841], 115)

List was among the first to emphasize that economic development required an extra effort for industrialization. The latter could be achieved by temporary protective measures in favor of infant industries. List opted for industrial development not only because he thought it was economically progressive, but also because he saw in industry a social force capable of transforming societies for the better; a factor overlooked by classical political economy:

It [classical political economy] does not discern that through the development of a manufacturing industry in an agricultural nation a mass of mental and bodily powers, of natural powers and natural resources, and of instrumental powers too (which latter the prevailing school terms 'capital'), is brought to bear, and brought into use, which had not previously been active, and would never have come into activity but for the formation and development of an internal manufacturing power; it imagines that by the establishment of manufacturing industry these forces must be taken away from agriculture, and transferred to manufacture, whereas the latter to a great extent is a perfectly new and additional power, which, very far indeed from increasing at the expense of the agricultural interest, is often the means of helping that interest to attain a higher degree of prosperity and development. (List 1966 [1841], 148)

List's thesis drew increasing attention in Germany and other latecomers. When List's thesis arrived in the Ottoman Empire, it was received warmly because it provided a theoretical foundation for ideas and policies that were formulated by trial and error in reaction to the consequences of the Anglo-Ottoman Commercial Treaty of 1848 (Özveren 2002, 138–140). With the arrival of List's work, a naïve historicism born in the Ottoman Empire during the second half of the nineteenth century was upgraded to a real thought and policy option on the eve of the twentieth century. Against this backdrop, it is easier to see why the Durkheimian sociologist in the making in Gökalp yielded to the Listian political economist.

Gökalp started with observing the lack of private initiative in the Ottoman Empire

motivated by an entrepreneurial spirit. Unlike many of his contemporaries who nevertheless tried to cultivate this spirit from below, Gökalp thought the state had to step in and play a role to fill this vacuum. He was not the only Ottoman Turkish intellectual of the time who attributed a positive role to state intervention. For example, Akyığıtzade Musa Bey was an articulate advocate of Listian political economy. However, he did not occupy a politically important position like Gökalp. On the whole, Musa Bey was more important than Gökalp if contribution to the pure theory of National Economy in the Ottoman Empire is concerned. But Gökalp played a far more prominent role in spreading Listian ideas and ultimately making an impact on policy-making. This is where Gökalp's primary importance rested.

According to Gökalp, industrialization, especially the formation of big industry, was of utmost significance for Ottoman/Turkish economic development. In a journal article dated 1922, the title of which could be translated as 'Economic Miracle', he expressed his conviction in this respect. Furthermore, he insisted that industrialization in Turkey could not be achieved by recourse to the free-trade policy of the Manchester School committed to a liberal market economy. In order to show why this was so, Gökalp enlisted geographical factors, coordinates in international location and natural resources, as responsible for differentiating Turkey from Britain. Given the nature of the English economy, humans were forced to become entrepreneurs, as they had no alternative. Because the arable land was limited in size, even smallholders shifted to trade and industry. The island location of Britain also helped develop trade and industry by facilitating transportation. In contrast, Turkish society had traditionally been associated with agriculture. Arable land was relatively abundant. On the other hand, traditional manufactures had been badly affected by free trade and foreign competition during the *Tanzimat* era. Last but not least, historically speaking, Turkish society did not prioritize individual initiative. Under these circumstances, the only way out of this vicious circle was to increase investment by way of state guidance (Ülken 2007, 76–77). Government, as well as regional administrations and municipalities, had to step in to promote industry as a national cause at any cost (ibid., 77). Gökalp's commitment to industry as a national cause had its roots in an article he published a decade earlier in the journal *Genc Kalemler*. It was then that he declared that they, the nationalists, would not succumb to the romanticized attractions of small industry but opt instead for building up real factories. In order to rule the seas, they wished to have the best ships. The social life they envisioned would not rest upon a simple community spirit but on solidarity and organization built upon individual free will. In every field, they were prepared to benefit from the most advanced theories and practices (Sağlam 2008, 188). This agenda for action put the emphasis on economic transformation for the sake of achieving social advancement in precisely the same way as List had thought that economic development by way of industry would ultimately exert a social force to transform society.

In addition to the encouragement of badly needed private initiative, economic specialization had to be advanced by an all-inclusive state. To this end, he envisaged an effective paternalistic state, and not an 'administrative' one, overwhelmed with bureaucracy poking its nose into everything. Rather than bureaucrats, specialists and technocrats could serve this purpose (Parla 1992, 199). The state would ideally not interfere with individual initiative but would serve a regulatory function (Toprak 1982, 350). Taking the Ottoman circumstances into consideration, Gökalp also saw that the state should directly

get involved in investment in order to give a direction to the national economy. Gökalp adopted a pragmatic approach to foreign direct investment and the import of foreign experts insofar as they were badly needed during the transition to a modern economy (Sağlam 2008, 208–209). He saw this as a second-best solution right for a transitional stage.⁴

During World War I there existed three rival approaches to economic policy within the ruling party (Çavdar 1992, 163). The first was the liberal economic policy as adopted by Cavit Bey, the leading Ottoman mainstream economist and Minister of Finance. The second was the so-called profession-based corporatist approach advocated by Kara Kemal and Memduh Şevket that endorsed the organization of Turkish-Muslim merchants and manufacturers as the vehicle of economic development. The third was the National Economy approach as elaborated by Ziya Gökalp and Tekin Alp in *Yeni Mecmua* (New Journal), a derivative of the Listian National System of Political Economy. In an article published in the above journal in 1918, titled ‘Economic Patriotism’, Gökalp attacked the free-trade policies of the Manchester School as not being universally valid, but instead being a specific ‘National Economy’ program designed for safeguarding industrialized Britain (Çavdar 1992, 165). To support his position, he reiterated the arguments of economists such as John Rae and Friedrich List that undermined the theoretical hegemony of the British Classical School. Gökalp elaborated this theme further in his *Türkçülüğün Esasları* (Principles of Turkism), published in 1923. This book contains his testimony to the nation shortly before his death. His position on economic nationalism was summarized in the related section called ‘Economic Turkism’. Once again, he made explicit the formative influence of Rae and List on his thought and policy preferences. He defended the National Economy approach as the only way to escape from economic backwardness. He insisted that, in order to become a modern nation, Turkey had to develop big industry, just as Germany and the United States had done. These countries could now benefit from free-trade policy because they were well prepared to do so. Until their stage was attained, economic protection was a must for the development of infant industries in Turkey. Gökalp always held on to the central role of big industry from the viewpoint of economic development (Gökalp 2007, 287). If anything, with the passage of time, the indispensability of big industry as the vehicle of economic development and social modernization was reinforced in Gökalp’s conception of economy. He bequeathed this heritage to the founders and first generation of the Republic. Their readiness for this cause bore its fruits in the favorable context the Great Depression offered in Turkey.

⁴ List himself acknowledged that technology transfer was admissible even in the European context when circumstances necessitated it: ‘The importation of foreign machines and know-how should also be dealt with liberally at an early phase of the development process. Nations with a calling, he felt, were capable of utilizing the equipment and technologies of the advanced economies to their own advantage and to accelerate catch-up development’ (Senghaas 1991, 457).

ETHEM NEJAT'S VIEW OF ECONOMIC DEVELOPMENT BY WAY OF EDUCATION

Ethem Nejat as an intellectual of the Constitutional era was dedicated to promoting Turkish nationalism by way of education. In his book *Türklük Nedir ve Terbiye Yolları* (What is being a Turk and the ways of education), he explored rival ideologies of Islamism, Ottomanism and Turkism and proposed that the ultimate goal of education should be the cultivation of a national Turkish identity. To this effect, however, one had to proceed through the concrete. He noted the deficiency of agricultural instruction with regret. In his view, the country could advance to a bright future by way of agriculture only (Ethem Nejat 2001), and development should start from the village. The primacy of agriculture en route to development remained a persistent theme in his publications. His report (published as a book: Ethem Nejat 1915) for the improvement of primary education while he worked in Izmir in 1914 as a schoolmaster is considered to be the first reform plan in education (Yılmaz 1978, 274–303). In this report, Ethem Nejat re-emphasized the dire need for specialized rural elementary schools, as well as the instruction of agronomy in village schools of all kinds (Ethem Nejat 1915). Ethem Nejat advocated teachers' training programs in conformity with the needs of agriculture, so that they could transplant their knowledge to villages where they would serve (Ethem Nejat 1913d). In addition, he identified a practical instrument for training peasants during compulsory military service. Upon returning to their villages, the conscripted peasants could apply their new knowledge to agriculture (Ethem Nejat 1909a, 1911b). These proposals were distilled from experience, and they were already expressed in embryonic form in the journal *Terbiye-i Yeni Fikir* (Educational New Idea) that he started putting out with his colleague Ferid Bey in Manastır in the Balkans in December 1911, and then shifted to Istanbul and Bursa as his subsequent appointments required. The journal set its motto on the cover page as the promotion of nationalism by agricultural instruction in schools. Belgium, the United States, Hungary, Austria, France and Germany were cited as examples of countries that took agricultural instruction seriously in spite of their higher levels of economic development. The journal reflected the echoes of the New School movement and other worldwide developments. The journal advocated a return to nature and experimentation as the more productive techniques of education. Agricultural instruction ought to be incorporated into the curriculum beginning with elementary schools, and teachers ought to be raised accordingly so that they could play a leading role once they were appointed to the countryside. It is no surprise that numerous articles dealing with husbandry, silkworm-raising and bee-keeping were also published to provide practical support.

Ethem Nejat also published a bi-weekly magazine, *Toprak* (Earth), with A. Ferid Bey. The important Ottoman newspaper *Tasvir-i Efkar* announced the publication of the journal as an important event on 12 April 1913. This became the most popular rural magazine of the time. The *Mesut Köy* (Happy Village) project put forward by Ethem Nejat and Ferid Bey for the resettlement of the Balkan refugees in Anatolia was first publicized in this magazine in 1913. It is not far-fetched to assume that Ethem Nejat and A. Ferid are the anonymous authors of the two extensive articles undersigned as *Toprak* editorials (Ethem Nejat and A. Ferid 1913a, 1913b). The co-authors foresaw two possible ways to handle the refugee resettlement problem without a major international

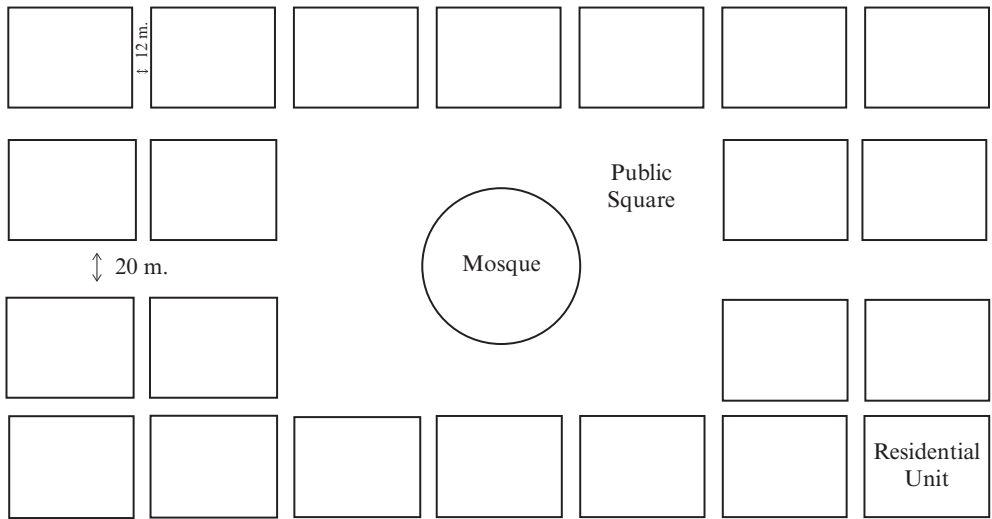


Figure 9.1 *Happy Village*

population exchange. One way was to add new housing units for the refugees to already existing villages. The other was to set up new 'model' villages for this purpose.

Ethem Nejat and his colleague elaborated a scheme favoring the second option. While addressing a pressing concrete problem, they brought education and political economy into close contact. Accordingly a Happy Village (Figure 9.1) was to be structured according to the demands of agriculture and husbandry that were identified as the two pillars of economic activity. The first question was the choice of a most appropriate site for the setting up of the Happy Village. The authors insisted that model villages should be set up at higher altitudes with fresh air and reasonable access to water resources, and a physician should be consulted while making the final choice.

At the center of the village, there should be a mosque surrounded by water facilities, all placed in a sizeable public square (10000m²). Village roads, major or minor, should lead either directly or indirectly to this public square. Major roads should not be less than 20 meters in width while 12 meters was considered sufficient for the minor ones. Houses and stables should be surrounded by gardens. Houses should be built in different sizes to accommodate one, two or four families in a unit. In any case, four households should share a unit of stables. In this project, four housing units occupied the corners and had separate access to an otherwise central stable unit with internal divisions when needed (Figure 9.2).

The assignment of a single unit of stables to several households would reduce construction costs. Hygiene could also be improved by better air circulation. The project involved assigning two *dönüms* of adjacent land per house, one for the vegetable and fruit garden and the other for the animals as either stables or outdoor fenced areas. In any case, units should be delineated by fences. Canalization should be arranged as a network to discard all disposables including those of the stables. Dairy processing facilities were also included in the project. Inhabitants of the village should be responsible for planting

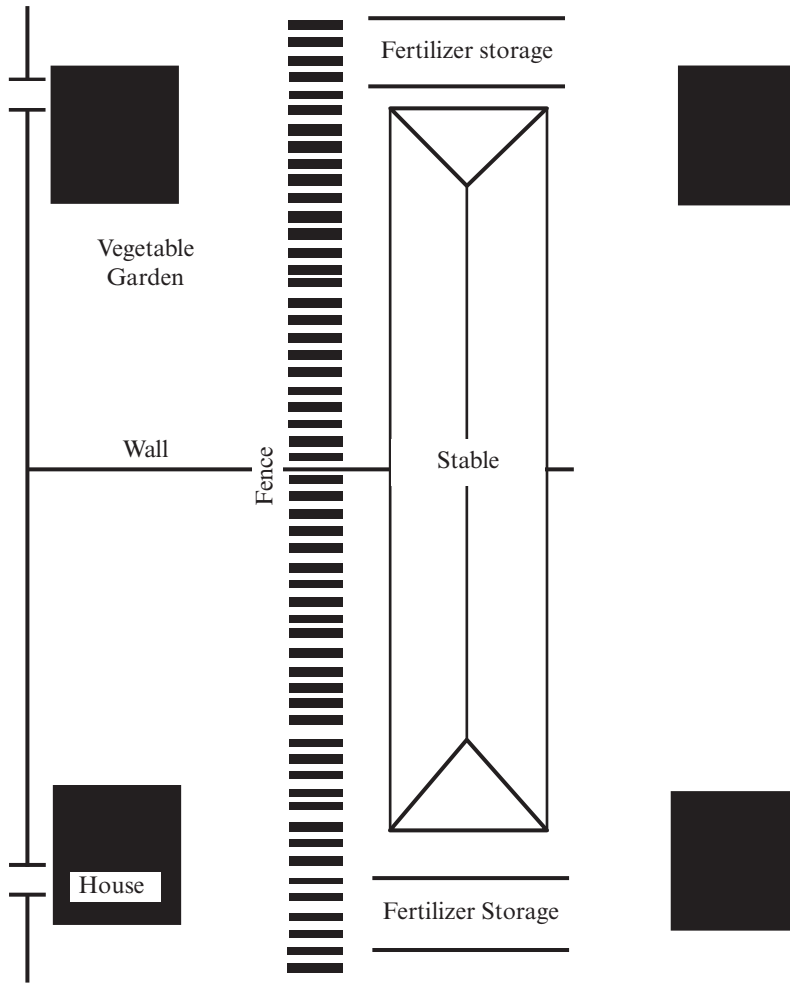


Figure 9.2 Residential unit

trees on roadsides and in empty public spaces in return for the housing facilities provided at no cost by the government. The houses should be built of stone or brick and be spaced out in such a way that as the wealth of inhabitants increased, they should be able to expand their facilities.

To each resident farmer, the government should allocate an additional 100 *dönüms* of arable land for farming. The project entailed detailed estimations of the housing and storage demands per house, depending on how the farmer would use the land by recourse to alternative plants he would raise. Every farmer would need a pair of oxen and a horse for working his land, plus a cow for dairy needs. Stable space assigned per family should meet these needs and also have storage space on the upper floor for dry grass and feeds. Water access and allocation were considered most important. A low cost should be matched with hygiene in this respect. Wells should be dug away from the last circle of

village houses and be at a slightly higher altitude whenever possible, in order for clean water to be obtained. Water should be brought to houses by mechanical and electrical power. When these were not available, a watermill should be put into effect, distributing its supply to a network of five fountains. The potential energy of streams and rivers should be best utilized (Ethem Nejat and A. Ferid 1913b).

Last but not least, Ethem Nejat and Ferid Bey assigned great importance to the village school, which should serve children as well as providing lifelong learning to all residents. The school should have two floors, each accommodating 300 people. The lower floor should be divided into classrooms for children's instruction whereas the upper floor should serve as a social club for villagers, endowed with a library that contained state-of-the-art literature on farming and husbandry. Every resident should contribute a *Kuruş* per month in order to keep this facility running (A. Ferid 1913).

While Ethem Nejat served as the head of the education department in Eskişehir in 1916, he published a newspaper of the name *Karacahisar*. This newspaper concentrated on agriculture and trade. Ferid Bey, then serving as the head of the department of statistics in the same city, contributed to the newspaper with agricultural statistics worthy of special praise.⁵ This local newspaper caught the attention of nationalist circles, so much so that in a 1917 article published in *Türk Yurdu*, *Karacahisar* was praised for its statistical content. *Karacahisar* republished articles from Istanbul-based nationalist journals (Erkek 2009, 311).

Ethem Nejat's preference for agricultural development via education remained a persistent theme in his writings from the very beginning until his journey to Germany in 1918. As early as after the Balkan War of 1912, he embraced the National Economy position of the Young Turks as part and parcel of his pro-Turkist standing. During the Constitutional era, the Ottoman government continued to be imprisoned in the narrow confines of classical liberal economic policy because of economic capitulations extended in the sixteenth century to France and a foreign-trade regime imposed by the Anglo-Ottoman Commercial Treaty of 1848. In reaction, the intelligentsia shifted to a more critical position by adopting List's National System of Political Economy. The CUP was attracted to this viewpoint as a political organization, whereas the Minister of Finance, Cavit Bey, serving in successive governments, continued to carry out liberal economic policies respecting the limits of dependency in which the Empire was caught. Only with the compulsory 'War Economy' experience of World War I did the government economic policy converge with the then dominant economic theory in the Ottoman Empire. The fortunes of the National Economy approach thus reached an all-time peak.

Caught in the turmoil of these hard times, Ethem Nejat found himself more concerned with economic development. It was first in the wake of the Balkan Wars that he had identified agriculture combined with trade as the true path to economic development for the Ottoman Empire. In his writings in various journals and newspapers, such as the *Osmanlı Ziraat ve Ticaret Gazetesi* (Ottoman Gazette for Agriculture and Trade), he singled out agriculture as the lord of all professions. Turkey, by virtue of its geography and climate,

⁵ We know that Ethem Nejat ascribed great importance to statistics; a phenomenon that reflects his intellectual affinities with the induction-minded and observation-oriented German Historical School.

was an agricultural country. Moreover, the Ottoman Empire was destined to remain an agricultural country, and a homeland for farmers, until economic independence was achieved in order to build up domestic industry. Hence, the development of agriculture was a precondition for the development of industry. By so thinking, he adopted a stage theory of economic progress. In his view, the advance of the farmer class would prepare the necessary conditions for great leaps forward and eventually big industry. Ethem Nejat did not reject the objective of attaining this final stage for the Ottoman Empire. He considered it to be only a matter of time. Had he rejected it outright, this would place him in the camp of classical economists who saw division of labor as geographically determined. By doing otherwise he converged with List, who believed in a dynamic progress of comparative advantages. To activate this chain of economic development, one had to start with the education of the farmer class. Moreover, he believed that all classes had to know more about farming than anything else, as everything depended on agriculture (Ethem Nejat 2001, 53). Education was needed because traditional agriculture waited to be transformed into modern agriculture in the first place.

Committed thus strongly to the primacy-of-agriculture thesis, Ethem Nejat was forced to address the way agriculture was linked to trade. He was well aware that the Ottoman Empire was geographically best suited for (long-distance) trade (Ethem Nejat 1911a). Ethem Nejat observed that agriculture and trade could move forward only in combination; without progress in one, the other would falter. As he put it, the tiniest particle of grain would involve both agriculture and trade. A synergistic interaction between agriculture and trade was essential, and education would provide an important input to either sector. He envisioned Turkish farmers raising output by using state-of-the-art technology, assisted by Turkish merchants who mastered foreign language(s) as well as the techniques and laws of trade in marketing the produce (Ethem Nejat 1913e).

Ethem Nejat was critical of the way agriculture and trade were conceived in the Ottoman Empire. People were accustomed to expecting a safe haven in government service. This prompted a disdain for risk-ridden professions. The better educated were thus directed to civil service, whereas others found employment in trade and agriculture. This he saw as a misallocation of resources. In order to break this vicious circle, the entire educational system had to be overhauled. The purpose of education should be to cultivate the values of individualism and entrepreneurial courage. As long as merchants and farmers remained uneducated, they could not follow developments abroad, and the Ottoman Empire would remain economically dependent upon the Great Powers (Ethem Nejat 1909b).

Ethem Nejat was committed whole-heartedly to the cultivation of an indigenous Muslim-Turkish merchant class. He regretted how foreign merchants penetrated into the Ottoman Empire. In his words, those young men who undertook to become merchants (or farmers) were sacrificing themselves heroically for the sake of the country's future. Their service to the homeland would be recognized when the day came (Ethem Nejat 1911a, 1911c).⁶ In his numerous journalistic articles, Ethem Nejat did his best to introduce hitherto unexplored fields of business and trade to the youth.

⁶ The metaphor linking the entrepreneur with the romantic hero is reminiscent of Joseph Schumpeter (1942, 127–128, 133).

In addition to entrepreneurial know-how, capital was badly needed. He sought the remedy in savings just like the classical economists. He quoted Richard Cobden, the free-trade advocate, with great approval in this respect. He claimed that the richest people in the world, such as Rockefeller, Vanderbilt, Carnegie and Morgan – not to mention his smaller-scale businessman friend in the United States, Charlie Joe – had made it up thanks to their saving habits that they combined with entrepreneurship. Despite his naïve view in this regard, to his credit, Ethem Nejat also recognized the need for banks and smaller savings and loan institutions. *Emniyet Sandığı* (Security Deposit), an institution set up to replace pawnshops and usurious lending by extending credit and loans to the needy, the activities of which were limited to Istanbul, should enter into collaboration with the postal service and thus extend its network to the countryside; a vision reminiscent of the Japanese example of mobilizing small savings for investment (Ethem Nejat 1911c; 1911d, 7–8). Last but not least, in order to mobilize capital for large-scale investment, Ethem Nejat was the first to recognize the need for co-operative ventures (Ethem Nejat 1910b; Toprak 1995, 125–126).

Ethem Nejat was well aware that capital shortage under the gold standard regime of the nineteenth century was as much an effect of the macroeconomic imbalance of international trade as it was a result of microeconomic saving habits. He observed that when imports systematically exceeded exports, a country was doomed to impoverishment and servitude. In his view, even when the Ottomans attempted to manufacture goods, they could not compete with imports that were marketed at considerably lower prices thanks to their lower costs of production abroad (Ethem Nejat 1913a). For the year 1912, he noted by recourse to foreign-trade statistics that Ottoman imports were twice as much as Ottoman exports in monetary terms. The difference went abroad, only to be saved and invested in further manufacturing enterprises which then outbid Ottoman manufactures in their own market in the next round. Thus the virtuous circle of economic development for foreigners was accompanied by a vicious circle of economic underdevelopment for the Ottomans. No wonder that the national product of the Ottoman Empire was destined to shrink as far as manufacturing was concerned. Thus, Ethem Nejat was able to link development with underdevelopment as two sides of the same coin, and considered all real economic development as relative. In his view, when a country could not expand its manufacturing output, it should limit its consumption to domestic produce as a second-best (Ethem Nejat 1913c). This end could be assisted by protectionism as Germany and Russia already practiced it. However, the Ottomans were restricted in doing so because of the capitulations. He anticipated that by adopting correct economic policies, Germany was soon to assume the economic leadership of Europe (Ethem Nejat 1913a). German economic policy reflected the heritage of List's National System of Political Economy, to a peripheral variant of which Ethem Nejat had thus made a modest contribution.

CONCLUSION

List's National System of Political Economy, in order to be applicable to the Ottoman context, required reinterpretation. There was much room for this kind of improvisation because the Ottomans were introduced to this approach through various channels,

without having had to go through a word-by-word reading of List's book as if it was subject matter for exegesis.

Characterized by a primarily agricultural economy that was increasingly subject to commercialization, the Ottoman Empire was far from being ready for rapid industrialization. Even so, Gökalp prioritized the pro-industrial cause, at no matter what cost, because he saw its socially transformative effect as badly needed. In this way, Gökalp remained more loyal to the immediate message of List and saw the difference between the Ottoman Empire and Germany as one of degree. On the other hand, Ethem Nejat thought that the difference involved a major gap and was therefore one of substance. Under these circumstances, one had to devise a different way of attaining List's endpoint. He built his development strategy on agriculture, by increasing education as an input, which would then impact upon the general state of development of the economy and prepare the ground for industrialization in the distant future. At first sight, primacy of the role of industry for economic development in List seems indisputable. However, List also saw agriculture and industry not so much as rivals but as complementaries in the development process. As he put it with great emphasis of his own: '*A nation which only carries on agriculture, is an individual who in his material production lacks one arm*' (List 1966 [1841], 160). To his merit, List was well aware of the reciprocating effect of agriculture on industry, without which industrial development strategy would be led to a bottleneck (Senghaas 1991, 460). Given the state of Ottoman agriculture, in order for it to function properly with respect to the needs of industry, much work was needed to begin with. This awareness distinguished Ethem Nejat from the mainstream of his time:

It is irksome that nineteenth-century development planners, who believed they were building upon List, read into him a one-sided strategy of industrialization under the banner of protectionism, but overlooked and disregarded his recommendations regarding the necessary development of agriculture. In east and southeast Europe, in particular, this faulty interpretation was in vogue. (Senghaas 1991, 462)

Moreover, much of the needed work had to do with improvement of human capital by way of education. Ethem Nejat was also conscious of this fact. Recent literature on List brings to light how he highlighted the importance of a highly differentiated educational system from the viewpoint of development as well as assigning a major role to 'invisible capital' or 'non-material capital', that is, in current terminology, human capital; 'those intellectual resources that List recognized as the foundation of agricultural, industrial, commercial, and administrative competences' (Senghaas 1991, 463):

If List did accord a certain priority to anything, it may be found in his high esteem for non-material intellectual forces as opposed to material goods. In 'invisible capital,' that is, in the stimulation and promotion of intellectual activity and inventive spirit, of knowledge and skills, in short, of competence, he saw a source of energy and strength that would be very difficult to replace by natural resources. (Senghaas 1991, 456)

In summary, 'List emphasized education as the bedrock for a progressive industrial society' (Daastøl, Chapter 4 in this volume). We have good reason to think that there exists a strong basis for the convergence of Ethem Nejat's position with this

fundamental attribute of List's approach. Therefore Ziya Gökalp and Ethem Nejat were both members of the Ottoman School of National Economy inspired by List, and yet the two men represent rival interpretations of it. We are therefore faced with a case of unity in diversity. This is correlated with the opposite sides of the agriculture-versus-industry debate in the nineteenth-century version of development economics in the periphery.

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10. Indian development thinking

Goddanti Omkarnath

INTRODUCTION

Development, seen as societal transformation, is a historical process. Problems, policies and theories of development can therefore be approached only in their historical context.¹ India's position in this entire field is, however, a paradox. On the one hand, it can lay claim to contributions in the realm of ideas and, in particular, to an original and ancient system of political economy. On the other hand, its actual record of development over a thousand years is dismal.² Today, India harbours one of the world's biggest concentrations of human deprivation.

The paradox is striking, given that India is an old civilization with natural resources so rich that they induced foreign conquests and rule for centuries, and given that its early achievements in language, philosophy, mathematics and astronomy are widely acknowledged.³ Above all, Indians, having fought many wars and developed many arts in the course of their long history, must have been a very practical people.⁴ The country's historical problem of development thus resides principally in this paradox of widespread want running parallel to its finest cultural achievements over several centuries. No satisfactory attempt to account for this paradox can be made because we are not in possession of a connected history of social and economic life in the subcontinent. Persistent gaps in source materials, particularly on social and cultural history, mean that such a history may not be easily forthcoming.

This chapter is not a study in economic history or history of development. My objective is rather to, first, identify historical moments of explicit economic thinking in India; and second, to place that thought in the immediate backdrop of institutions and policies of the state.⁵ I begin with economic thinking in ancient India when the foundation for

¹ A major reason why neoclassical development economics fails to enlighten is because it is structurally 'closed' with respect to history.

² According to Maddison (2007, 49), Asian economies were weak relative to the West even before the colonial period.

³ See, for example, Durant (1931).

⁴ This should cast doubts on certain oriental and colonial historiographies that depict Indians as either incorrigibly other-worldly or always steeped in primitive social structures.

⁵ Indian scholars have often emphasized the crucial link between theory and history. Ganguli (1977, Foreword), for example, notes: 'I have often deplored . . . the lack of proper interest in economic history and economic thought seen in their inter-relation. These have been relegated to the background in the interest of making room in the syllabus for Western economics and econometric models useful in themselves which, however, our students fail to absorb as part of their perspective of Indian economic reality'.

an Indian system of political economy⁶ was laid in the treatise *Arthashastra*,⁷ dated no later than AD 150. Among other things, this treatise indirectly captures the general state of the economy and society of India in the period of the Mauryan Empire. Although rich literature has accumulated on the economic history of medieval India, pointing to significant shifts in social class differentiation by the end of the Mughal Empire, no corresponding developments in the field of economic thought as such are evident. At the same time, this period served to complicate the simplicity and transparency of structure evident in the period of *Arthashastra*. It is also necessary to appreciate the kind of social formation in place when the British rule began in 1750. The second episode of explicit economic thought after Kautilya occurs only in the nineteenth century as part of the nationalist critique of British rule in India. The nationalist discourse is notable for its informed and economic-theoretic critique of British policy. In addition, it is an occasion for conceptual innovation and scientific thinking about the structural problems of economic backwardness.

The final episode of economic thinking I shall consider relates to debates on strategies for economic development in free India in the 1950s. The attempt of a post-colonial nation to achieve economic transformation through a state-led programme of industrialization – and that under conditions of a ‘mixed’ economy and liberal democracy – was to draw worldwide attention. Both before and after the programme unfolded, important Indian contributions to development theory and policy, apart from economic statistics, placed India at the forefront of development economics. It became clear in less than two decades, though, that the programme of industrialization was not poised to mobilize India’s vast rural economy. In the 1960s and the 1970s, attention of economists was drawn to the warped institutions of agriculture as a structural consequence of limited industrialization. The result was an exceptionally rich corpus of literature on the theory of agrarian markets. The final section of this chapter is a concluding statement.

A limitation of the present chapter must be noted. It is well known that there has been a lively discourse on neoliberal economic reforms in India since the early 1990s. Considerations of space and the fact that the reform process is still unfolding in many crucial areas prevent me from considering this discourse here. However, the interested reader may consult the excellent recent surveys by Chandrasekhar (2015), Ghosh (2015) and Patnaik (2015).

THE INDIAN SYSTEM OF POLITICAL ECONOMY

A consideration in some detail of *Arthashastra*, which is India’s – and perhaps the world’s – first systematic treatise on political economy, is critical for my subsequent discussion. For implicit in the treatise is a well-developed system of political economy (see

⁶ Systems of political economy can be approached in two distinct ways. One way is to relate them to societies in different stages of historical development. Adam Smith (1976) thus proposes two systems of political economy until his time, viz. ‘agriculture’ and ‘commerce’. The other way, proposed by List (1928), is based on nationality. ‘National’ systems of political economy help to bring out the specificities of individual economies in a given epoch.

⁷ Meaning ‘the science of wealth’.

footnote 6) that is of theoretical and historical interest. Theoretically, it brings together into a consistent framework economic activity, social classes, the state, law, ethics and philosophy. Historically, it lays out the 'initial conditions' of economic organization in the subcontinent and provides a vantage point from which to view evolutionary change, especially when there is a paucity of connected history.

Kautilya,⁸ the author⁹ of *Arthashastra*,¹⁰ declares that his treatise concerns 'the art of government' and that it is, by nature, 'instructional'. The work is indeed often referred to as a manual of statecraft and occasionally as a manual of economic administration. However, readers familiar with the writings of such eighteenth-century political economists as William Petty, François Quesnay and Richard Cantillon, all of whom were theorizing on feudal agricultural systems of England and France, should instantly recognize in Kautilya a well-developed system of political economy. It corresponds to the agrarian economy of ancient India marked essentially by independent peasantry.¹¹

Beneath its façade of a manual of instructions, *Arthashastra* seems to satisfy every requirement of a developed system of political economy. First, it is by its very title 'the science of wealth and material well-being'. Secondly, it attributes all wealth to 'economic activity',¹² which according to Kautilya is 'agriculture, cattle-rearing and trade'. Third, there is a clear-cut notion of wealth as comprising 'grains, cattle, gold, forest produce and labour' (Kautilya 1992, 108). Fourth, the human element is uppermost in the scheme. There is thus 'no country without people' and 'no kingdom without a country' (ibid., 108). Fifth, the economy and its management are not peripheral to the affairs of the state, but they form an integral part of statecraft. The state here is, of course, synonymous with the King. 'Without an active policy, both current prosperity and future gains are destroyed' (ibid., 74). Kautilya's identification of his work with the 'art of government' (see above) is strikingly close to Adam Smith's idea of political economy as 'the science of the statesman' (Smith 1976).

Sixth, there is a clear identification and positioning of the social classes and ranks in relation to the economic system, a central feature of any system of political economy. The social classes also form a pyramid of social power. At the base of the pyramid are direct producers and labourers (the *sudras*) and the trading class (the *vaisyas*). Standing on this base of the pyramid are the warrior class and nobility (the *kshatriyas*), from which arise the King and the ruling class. At the very top is the priestly class (the *Brahmins*), which combines the duties of conducting rituals, teaching from the scriptures, imparting training in arts and advising the King.¹³

Seventh, the social classes are bound together into what Adam Smith called a 'system of morality' (see Bharadwaj 1990, 14). Apart from the moral force of the *Dharmashastras*,

⁸ Also known as Vishnugupta and Chanakya, he was a minister in the court of Emperor Chandragupta Maurya. He helped the Emperor vanquish the Nanda dynasty.

⁹ There were probably a succession of authors (even 'schools') compiling and refining the text, and Kautilya, not being the originator of the science, was 'the last and the greatest master of it' (Kautilya 1992, 20).

¹⁰ The treatise is dated variously between 450 BC and AD 150. The first English translation of the work is, however, as recent as 1915. See Shamasastri (1915).

¹¹ Feudalism in Indian agriculture was to become a phenomenon only in the early medieval period.

¹² 'The root of wealth is economic activity and lack of it brings material distress. In the absence of fruitful economic activity, both current prosperity and future growth are in danger of destruction' (Kautilya 1992, 108).

¹³ This identification of social ranks follows from the ancient *varna* system, which has the sanction of the Hindu *Dharmashastras* (which are spiritual, moral and temporal laws).

the various obligations and functions of each class are ensured by a legal framework, law enforcement and a penal code (*danda niti*). Thus detailed instructions are laid out on wages of labour, prices of produce, taxes and duties, and rates of return due to traders. An elaborate sub-manual appears on the qualities of the King, who has the overarching duty to protect people, nurture economic activity and maintain social order. Particular emphasis is laid on the maintenance of land, water and forest resources.¹⁴

The eighth feature of *Arthashastra* is its strong link with philosophy. Kautilya evidently regarded philosophy as 'the lamp of all the sciences, the means of performing all the works and the support of all the duties' (see Radhakrishnan 2008, 2–3). Although its system of morality derives proximately from the *Dharmashastras* (spiritual, moral and temporal laws), whose authority is ultimately vested in the *Vedas*, *Arthashastra* is elevated to the status of a subsidiary *Veda* (*upaveda*), along with the ancient sciences of medicine, archery and music.¹⁵

Finally, it is important to situate Kautilya's system of political economy in the context of a political organization. Although the reference in the treatise is invariably to the King and the kingdom, it is advisable to invoke the political organization of an empire, because the latter is more general and helps us to better relate to the latter-day Mughal Empire and British India. The historical backdrop of *Arthashastra* is the Mauryan Empire of ancient India.

The empire is a federation of kingdoms, and the basic unit of a kingdom is the village community. Agriculture was organized by landowners who worked the lands with a combination of family labour, slaves (probably captured in wars and sold to farmers) and hired labour. The largest landowner is usually the village headman, who is appointed by the King to collect taxes from the villagers and often to maintain law and order. Most villages have artisans catering to the production needs of agriculture and the consumption and service needs of villagers.

Towns and cities are centres of trade and craft production for export within and across kingdoms. Besides, they function as garrison towns and therefore as centres of military production. Many towns and cities have grown around temples and centres of arts and learning. Urban population is dominated by traders and their retainers (which may include slaves), craft persons of particular trades, soldiers, priests, teachers, local aristocracy, horse trainers, accountants and so on.

The King collects taxes from landowners (usually one-sixth of the harvest), traders, handicraft centres, and in many cases from the hill tribes. Taxes are mainly in kind, although the use of coins has only just begun. Large kingdoms have become empires through annexation. In the case of an empire, the Emperor has to grant some autonomy to the kings or governors (who may well be princes of the royal family), who will nonetheless collect taxes¹⁶ and supply troops to the Emperor.

The aforesaid analysis of society, economy and polity helps in fixing the basic contours of the political economy of ancient India and to locate major shifts in economic organization and social-class differentiation over the medieval period of over a millennium.

¹⁴ Instructions as to the management of the palace, the treasury, the intelligence system and the arts of diplomacy, defence, war and empire-building are too well known to be recounted here.

¹⁵ See Bharatiya Vidya Bhavan (2015).

¹⁶ Typically, the Mauryan Emperors have had a centralized system of officials to collect taxes.

CHANGES IN THE SOCIAL FORMATION

There is no work on political economy comparable to *Arthashastra*, or perhaps no new economic ideas at all, in medieval India. Yet the medieval period of more than 1000 years (AD 600–1750) is critical because it is in this period that the simplicity and idyll of the social formation of the ancient period gives way to a dented and twisted social formation. Medieval India marks the beginning of destitution among the masses. At the same time, the complications imparted to the Indian social formation are serious enough to raise formidable problems for analysis itself. What is more, both of these strands of the problem – structural poverty and theoretical complexity of the system – survive to date. A brief review of developments in this period is also useful in understanding the kind of social formation the British inherited in India.

Medieval India saw major changes in political regimes. The first half of this period (600–1200) saw the decline of native empires and the rise of localized aristocracies. The other half (1200–1750) was marked by foreign rule. The Sultanate period (1200–1500) saw the first all-India empire after the Mauryas, successively under Allauddin Khalji, Tuglaq and the Lodhi rulers. The three centuries of the Delhi Sultanate were followed by the Mughal Empire (1500–1750) (Habib 2008).

In terms of changes in economic organization, the truly significant development in the early medieval period (600–1200) was the emergence of a specific form of feudalism, animated by local aristocracies and land grants to Brahmins, which led to pervasive share-cropping and many layers of intermediaries. This phenomenon of ‘feudalism from above’ is distinguished from the European feudalism marked by a manorial system (see Sharma 1980). Adding to this change in differentiation of social classes was the further stratification of society at lower levels through the superposition of the caste (*jati*) system.¹⁷ Although horizontal and vertical shifts in the caste system were common, the emergence and growth of the ‘untouchable’ castes was conspicuous. This entrenchment of the caste system and caste-based social and economic discrimination was to prove impervious in subsequent history. Both the Mughal Empire and the British rule had to reckon with this, and in contemporary India, caste and identity politics are major issues.

Changes in the economic sphere were narrowly circumscribed, for they related to such issues as whether the craft economy was diffused among villages (as was the case in the early medieval period) or whether it received a new lease of life under the force of trade and commerce (as happened in the Sultanate and Mughal periods). A long view of economic change in these latter periods reveals the growing commercialization of the rural economy through the interrelated phenomena of monetization, the prominence of a cash nexus owing to heavy rent and taxes in money, the introduction of new export-oriented crops and the drawing-out of rural produce to towns. At the same time, the conditions of ‘Indian feudalism’ and the hold of the caste system noted above were strengthened. Incidence of slavery increased, as slaves were not only captured in war but also obtained in lieu of unpaid taxes. Forced commerce unaccompanied by a genuine transformation of livelihoods meant that institutions became complicated. This already posed a great challenge for characterizing the social formation in terms of available historical theory

¹⁷ Over and above the *varna* system of ancient India as noted (see the previous section).

drawn from the West, including Marxist theory.¹⁸ Even at the end of the Mughal period, these contradictions in society and economy persisted, despite rationalization of revenue and general administration. A new class of intermediaries, called the *zamindars*, who were part 'proprietors' of land and part intermediaries in revenue collection, was added. Both commercialization (involving sub-infeudation, rack-renting and usury) and caste oppression combined to increase the ranks of the landless and the 'untouchables'. This was the kind of social formation that the British inherited when their rule in India began in 1750.

As a prelude to my discussion of scientific economic thinking in India in the nineteenth century as part of what has been called Economic Nationalism¹⁹ (see the next section), it is necessary to take a quick view of the difference that British rule made for the social formation of India. Two distinct features of British rule must be noted. First, unlike the Turks or the Mughals who, having conquered India, stayed on and became a part of India, the British conquered India to make it a colony of the British Empire. And they left India when it became free. Second, the surplus that the earlier rulers squeezed out of the economic system remained in India and was used in some ways to support economic activity within India, albeit with income-distributional shifts on the way. Under the British rule, however, the surplus squeezed not only saw a quantum leap in size, but all of it was taken out of India, with no compensating British investments in India. A necessary consequence was a stagnation and shrinkage of the overall activity in the colony, which, over the course of two centuries, impoverished people. In fact, India was brought under direct rule of the Crown midway (in 1858), from the hold of the East India Company, in order to serve the growing needs of British industry for raw materials and captive overseas markets.

It is in the context of these systemic forces of decline that changes in social class differentiation must be seen. Native rulers and nobility were to a considerable extent replaced by British officials and agents. The forces of 'forced commerce', already set in motion by the Mughals, were strengthened with deleterious consequences for the economy and people. Native industry, dominated by craft production, was destroyed under the force of competition of British goods (especially textiles) and a deliberate policy of making the native rulers meet their needs of military equipment through imports from Britain. This process of 'de-industrialization' meant that the ranks of agricultural labour in rural areas swelled. At the same time, British agricultural policy led to the pauperization of the peasant. An increasing number of intermediaries between the state and the tiller, high demands of land revenue, forced shifts in cropping patterns (in favour of commercial crops), frequent visitations of droughts, floods and pestilence, and an increasing hold of the moneylender and merchant crushed the peasantry in all regions. The old *zamindar* class itself was ruined under the heavy revenue demands of the British government, which sold off *zamindari* estates of defaulters to merchants and the moneyed classes who usually lived in towns (see Chandra 2009). The national movement itself and the rise of economic nationalism in nineteenth-century India must be viewed against this backdrop

¹⁸ 'It is not easy to characterize the social formation that existed during the thirteenth–fifteenth centuries in terms of designations and definitions available in historical theory' (Habib 2008, 63). Thus Marx's concept of the 'Asiatic Mode of Production' does not seem to hold for India.

¹⁹ The term is from Chandra (1966).

of overall dissipation of dynamism in the economy, further differentiation of social classes, and mass poverty.

ECONOMIC NATIONALISM

That systematic economic thinking after *Arthashastra* was to take place only in the nineteenth century is explained, as we have seen, by objective conditions. The latter half of the nineteenth century saw substantive growth in economic literature on the underdevelopment of India under the British rule. The growth of economic nationalism (Chandra 1966), a consequence of overall stagnation in the economy and growing pauperization, is an integral part of the national movement itself. The purpose and reach of the new economic literature went beyond mere academic exercises. It was meant to inform, educate and mobilize public opinion about the British misrule. It must be noted that many of these economists combined their economic knowledge with reformist zeal. Raja Ram Mohan Roy, M.G. Ranade and Gopal Krishna Gokhale, among others, were champions of social reform. Nationalist economic writings were centred on three major themes: (1) the nature and mechanism of 'economic drain' under British rule; (2) the problem of rural economy; and (3) the case for industrialization. In each case, appeal was made to facts, policies of colonial government and their underlying theoretical premises. Incisive and exhaustive analyses of these problems often led to conclusions so different from Western economic theories that there was a serious call for a genuine 'Indian Economics' from authors like Ranade (see Chandra 1990).

Economic Drain

Literature under this theme sought to bring into relief a range of issues connected with trade, modes of surplus extraction through non-trade channels, balance of payments, finances of the colonial government, the gold standard and the implication of all this for poverty and distress in India. Although the issue of economic drain was raised initially by Raja Rammohan Roy and followed up by others as well, the name of Dadabhai Naoroji has become synonymous with this literature. Even so, Naoroji had a broader purpose of framing the Indian economic problem in general.²⁰ The critical issue related to the paradox of India registering a constant trade surplus along with a constant balance-of-payments deficit and the doctrine of 'free trade' in English political economy (see Habib 2012, Ch. 2). An astute analysis of data brought out the economic drain through 'unrequited' exports, tribute from native rulers, home charges, private remittances of British servants in India, repatriation of profits of British companies, and finance for British wars abroad. The benefits of exports never went to producers in India because they were, in the first place, taxes collected from Indian producers, or their purchase was tax-financed. The overall thrust of work on drain theory went beyond technicalities and projected to the educated middle classes the face of the 'un-British rule of India' (Naoroji

²⁰ 'By means of drain theory he presented a framework of Indian economic thought into which some of the broad features of the Indian economy fall into place to form a coherent image' (Ganguli 1977, 127).

1901). In particular, the overall decline of Indian economy and deprivation were attributed to the systematic drain of its produced wealth without its productive accumulation in India for the benefit of Indians. Subsequently, this literature also encouraged research on trade policy, banking, money and finance by a new generation of Indian economists such as Coyajee and Adarkar (see Krishnamurty 2009). The upshot of the discourse on economic drain was a theoretical critique of the notions of free trade and competition underlying colonial policy.

The Problem of Rural Economy

This is an area which engaged both historians and economists in a big way. Historians developed a rich corpus of literature on the impact of British rule on rural India through pan-Indian surveys as well as regional studies.²¹ Research ranged widely from landholdings and irrigation to crop output and yields; from historical demography to commercialization of agriculture; from agrarian relations between landlords, peasants and workers to the functioning of agrarian markets in product, labour, lease and credit; from land settlements and taxes to interface with the craft economy and trade; and from famines to ecology. The literature, vast and varied as it is, invariably pointed to the deteriorating condition of agriculture due to colonial policies leading to heavy rent-tax burden, indebtedness and heavy pressure on land. On many of these issues, Indian historians could dispute with historians of colonial territories (see, e.g., Bagchi 2010).

Economists such as G.V. Joshi also initiated special studies in Western India to investigate certain analytical issues arising with regard to the agrarian economy, such as the meaning of 'rent', the diversity of labour-hire and wage systems, estimates of costs, productivity and so on (see Ganguli 1977). On labour use in agriculture, for example, Joshi aired the notion of 'enforced idleness' of rural labour. Ranade raised an analytical issue with regard to land tax: 'Land tax is not a tax on rents proper but frequently encroaches upon the profits and wages of the poor peasant'.²² This tradition of historical induction methods was to gain momentum in the first half of the twentieth century. Studies such as these signified a critical and guarded absorption of Western economic ideas into the study of the Indian economy.

The Case for Industrialization

A recurrent theme of all study under economic nationalism is industrialization. Even when the focus was on rural problems, scholars invariably located the solution in developing modern industry. Without industry relieving the pressure on land, no meaningful reform and realignment of agrarian institutions was deemed possible. Further, industrialization was seen as a means to social progress through urbanization and cosmopolitan values. Finally, there was a general consensus that the state (British government) should take the lead in promoting industry, given the absence of a native capitalist class. Indian business people were essentially traders and merchants. Nationalists criticized the

²¹ See, for example, Dutt (1950) and Kumar and Desai (1983).

²² Ganguli (1977, 173).

government for limiting industry to chosen areas which served only British interests, for example plantations, mining, railways and banking.

Ranade, for example, anticipated Arthur Lewis when he wrote: 'With an unlimited supply of cheap labour, we could go far' (Ganguli 1977, 179). He also favoured multiple forms of organization for industries. Units involving large chunks of capital should be joint stock companies, while process industries allied to agriculture may be producer co-operatives. Towards the end of the nineteenth century, a few Indians went on to set up textile units in Western India. This meant there was a slow emergence of native capitalists and a modern workforce, which in turn strengthened demands for industry. A characteristic feature of nationalist thought on Indian economy is a scientific approach. Arguments were based on careful analysis of facts, a thorough understanding of English political economy and a critical examination of colonial policies.

Economists of the Early Twentieth Century

The first half of the twentieth century saw a generation of new economists in India who applied themselves to issues of development and policy in the backdrop of important developments in the global arena, such as the Russian Revolution, Keynesian ideas and post-war reconstruction in Eastern Europe. These coincided with the establishment of three presidency universities, apart from the ones at Allahabad, Lahore and Benaras. This meant new employment opportunities in professional economics. The fact that many of these economists had travelled abroad for their doctoral studies, served on official committees and went on to set up or develop new centres of research gave a new thrust to study, research and policy-making in economics in India.²³ While the grand themes of rural economy and industrialization continued to engage them, new and more focused studies were spawned in wide-ranging areas, such as money and finance, trade policy, planning, economic history, national income, economic theory and so on. It would be cavalier to select some names and ignore others. My sample of four economists is based on not only their own original work but also their huge impact on all departments of professional economics: teaching, research, policy-making and institution-building. And all of them made their mark in post-Independence India, and on the world scale, for these reasons. The names are A.K. Dasgupta, V.K.R.V. Rao, D.R. Gadgil and B.R. Ambedkar.

Dasgupta was in many ways a doyen of economic theory in India. He taught theory in many centres between Dhaka and Delhi and mentored many economists of fame. He imbibed a taste for major systems of economic theory in a comparative framework: classical, neoclassical and Keynesian. This interest was honed partly by his contact with Cambridge economists. And he deployed his theoretical understanding in the clarification of many aspects of planning, development and economic policy in India.²⁴

V.K.R.V. Rao, a student of Keynes, brought to India a composite flavour of Keynes which spanned his pioneering studies in national income (Rao 1940), the structural problem of unemployment (Rao 1938) and his work on the applicability of Keynes's type of demand management for India (Rao 1952, 1953). His association with the Planning

²³ For a convenient survey and a sample of research by these economists, see Krishnamurty (2009).

²⁴ See Dasgupta (1976, 1983, 1985). His 1983 work also carries a selection of his papers on planning.

Commission, his founding of first-rate teaching and research institutions in Delhi and Bengaluru, and his initiatives on studies in regional planning, education and nutrition continue to wield enormous influence on professional economics in India. Rao also had a stint in politics which saw him as India's Education Minister.

D.R. Gadgil, known for his early work on the economic history of Indian industry (Gadgil 1924), headed the famed Gokhale Institute at Pune. In that capacity, he led a wide range of empirical studies of institutions that were theoretically informed and yielded insights for policy-making. He was a strong votary of producer co-operatives. His association with an early United Nations Committee of Economists and subsequently with the Finance Commission and the Planning Commission was fruitful. Gadgil's debate with Mahalanobis on the desirability of centralized nationwide sample surveys using uniform concepts (see Dandekar 1953, 1954), as well as his critique of the way planning operated in India (Gadgil 1967), remain classics in their fields.

B.R. Ambedkar, famous as the Father of the Indian Constitution and a champion of India's oppressed castes (the *Dalits*), was also a fine economist, having studied at Columbia and London. His considerable work in economics (see Ambirajan 1999) included papers on the problems of money and finance in colonial India (Ambedkar 1925), apart from a classic paper on the problem of small holdings in Indian agriculture (Ambedkar 2009 [1918]). His intellectual impact on the ongoing discourse on caste in India is as enormous and complex as the problem itself.

INDUSTRIALIZATION AND DEVELOPMENT ECONOMICS IN FREE INDIA

Professional economics in independent India has grown so much in size, range and sophistication that no brief survey can do justice to it. Economics is popular as a subject at senior school, college and university levels, but the profession itself extends beyond colleges and universities and includes a host of publicly and privately funded research organizations, higher levels of bureaucracy, commerce, banking and the financial sector, the media, the corporate sector and non-governmental organizations. I cannot but be very selective as to themes and authors. Fortunately, there is a much stronger undercurrent of continuity of basic research themes than people realize. While much of current teaching and training in economics in India today is dominated by conventional neoclassical theory, the focus of research is still the Indian economy in its various aspects. This is not surprising, given the size and diversity of the economy and the multiple forms its development or lack of it assumes. The situation is also partly the result of the great latitude that the modern-day project of 'development studies' seems to offer.

The one big theme of the Indian economy that seems to stay with it, through its long and convoluted history of at least 1500 years (see above), is the palpable inability of the system to transform itself from being a backward agrarian economy into one with a discretely higher product per worker across the board. Since industrialization holds the key to such transformation, my discussion of development thinking in free India can be usefully organized around this overarching theme. In other words, I seek to highlight thought which has a direct bearing on India's programme of industrialization which was initiated in the 1950s. This selection of theme is also consistent with the history of

that strand of 'development economics' which has roots in the post-war reconstruction of Eastern Europe (see Hirschman 1981). I shall touch upon the landmarks of thought broadly relating to the philosophy and content of India's programme of industrialization, its operation, reach and consequences for theory and policy. India may not have yet succeeded in realizing its dream, but we may not doubt the value of its economic thought for the general field of development economics. Indian contributions to development economics after 1950 are best captured under four headings: planning theory and policy, theory of the agrarian economy, macroeconomic theory and statistical methods. All four areas, it may be noted, are closely related to the career of the programme of industrialization.

Planning Theory and Policy

On attaining freedom from British rule in 1947, India adopted a strategy of autonomous development through a programme of state-led, import-substituting industrialization. That the programme was to operate within the context of a 'mixed' economy and liberal democratic polity attracted world attention. The programme entailed adoption of formal methods of planning. The Plan Model that was adopted for India's Second Five Year Plan (1955–1960) is the materialization of the political will of the Indian National Congress in general and that of the Nehruvian state in particular. Discovered independently of Feldman, Mahalanobis's model proposes a strategy of industrialization that requires a progressively higher investment coefficient for the capital-goods sector in order to raise the long-term rate of growth of the system. It is premised on import substitution, public investment in heavy industry to be financed by non-inflationary modes of resource mobilization and sufficient elasticity of the supply of the wage-goods sector, which in turn required realignment of agrarian institutions on the one hand and modernization of traditional industry on the other (see Chakravarty 1987). Given the social class differentiation and the complex of institutions that India inherited, it is easy to see how daunting these premises are. Not surprisingly, doubts were expressed in some quarters about the feasibility and even desirability of this strategy. Gandhians as well as a potentially rival model of 'wage goods' (as against Mahalanobis's model of 'capital goods') emanating from the economists of Bombay University (see Vakil and Brahmananda 1956) did generate some debate, but nothing to hold the sway of Nehru–Mahalanobis strategy.

The Mahalanobis model was followed by a discourse on the theory of investment planning (Chakravarty 1968) and choice of techniques (Sen 1960). Subsequent five year plans saw more sophisticated multi-sectoral consistency models built by Indian economists, often in collaboration with MIT economists (see Bhagwati and Chakravarty 1969 for a review). While Indian contributions in the area were well received, it seemed that formal plan models were progressively delinked from the social framework. At their best, plan models were exercises in investment programming rather than credible attempts at institutional engineering.

A more vigorous debate ensued on the mechanics of plan implementation, which was in practice left to the bureaucracy. As a consequence, bureaucratic controls and rules, rigid as they were, accumulated and became a substitute for policy. However, policy by its nature is not a fixed set of rules but a dynamic process. Theoretical objections were raised against the trade regime that was in place and the policy of import substitution

(Bhagwati and Desai 1970). Even a stronger critique of 'planning without a policy frame' (see Gadgil 1967) was largely ignored. The political programme of land reforms through radical land redistribution was a failure. The massive investments in the capital-goods sector together with food shortages meant that the system had built up a high inflationary potential. Meanwhile, a debate started on the possibility of taxing agriculture and on the terms of trade between agriculture and industry (Mitra 1977) and the implied resource transfers.

By the mid-1960s, public investment slackened, owing to a fiscal crisis of the state, leading to an overall stagnation (Raj 1976) and 'structural retrogression' (Shetty 1978) of the economy. The debate on industrial stagnation that ensued brought out the important fact of the 'crowding-in' effects of public investment in the economy. Around the same time, political doubt was raised as to the impact of 15 years of planning on people's general standard of living. A distinguished committee appointed for the purpose came out with a negative report. Mrs Indira Gandhi was quick to see the political writing on the wall and won the general elections with the slogan of 'banish poverty' (or *Garibi Hatao*). The political pressure to 'do something' about mass poverty led to a programme of directly subsidizing the consumption of the poor through a sprinkling of welfare programmes. The entire scheme found a formal integration into the plan model itself. The 'Technical Note to the Approach Paper on the Fifth Five Year Plan' provided for a 'consumption sub-model' for the first time to permit a direct attack on poverty through consumption subsidies rather than by productively absorbing the poor into industry. This marked the beginning of the institutionalization of poverty alleviation. A whole new research industry on the measurement of poverty was waiting to happen.

Theory of the Agrarian Economy

While India's development plans did lay the foundation for a modern industrial economy, they failed to relieve the pressure on the vast segment of low-productivity agriculture. In other words, industrialization failed to mobilize the rural economy. The attention of scholars was drawn to the conditions of agriculture. This was inspired partly by political developments in China and the growth of radical Maoist groups in India. Also, there was a general renewal of interest in the study of peasantry all over the world. K.N. Raj had already set out to develop a framework for Indian agrarian economy (Raj 1990). Studies using data from Farm Management Surveys raised issues of small farm efficiency. A new scholarly debate on the so-called inverse relation between land size and land productivity followed. A high point of this debate was the insight into the peculiar structuring and functioning of 'factor markets' in agriculture and the inauguration of the concept of 'inter-linked markets' (Bharadwaj 1974, 1985) and 'semi-feudal' agriculture (Bhaduri 1983). Simultaneously, Marxist scholars started investigations into the 'mode of production' prevalent in Indian agriculture (Patnaik 1990). The studies brought out the complexity of a system of overlapping modes of production within agriculture.

Macroeconomic Theory

With limited industrialization and general atrophy of planning, Indian economic growth was subject to a range of shifting macroeconomic constraints. The need arose

to understand the operation and implications of these constraints within a consistent macroeconomic framework. Effective demand failures emerged even while supply-side constraints persisted. This led economists to adopt a broad 'structuralist' approach to study India's macroeconomy (see Rakshit 1982, 1989; Patnaik 1995). Drawing on elements of Keynes, Kalecki and Marx, this new macroeconomics proved fertile.

Attention turned to the problem of inflationary process in the Indian economy, especially in the wake of the two oil shocks, and to the issue of whether the process of import substitution had exhausted itself. Apart from scholarly interest in the fiscal crisis of the state, the payments crisis and Indians accepting the first International Monetary Fund (IMF) conditional loan in 1981 was the centre of discourse. There was a global revival of interest in the remarkable success stories of many Pacific Rim countries, slowly igniting an ideological discourse on the wisdom of 'export pessimism' implied in the Mahalanobis strategy. For the first time in free India, imports of capital goods were liberalized in the early 1980s.

Meanwhile, the fiscal problem, the payments problem and inflation started closing in, and a new crisis broke out towards the end of the 1980s in conjunction with global developments relating to the Soviet Union and the Gulf War. India's resort to a second conditional loan from the IMF led to the acceptance of comprehensive macroeconomic reforms of 'stabilization' and structural adjustment. As the reforms roll out in stop-go fashion, a new debate currently is on neoliberal reforms. The reason for not considering this debate in the present chapter is given in the first section.

Statistical Methods

A discussion of Indian contributions to development economics would be incomplete without a mention of achievements in the field of statistics. Mahalanobis and the Indian Statistical Institute (ISI) which he founded promoted the idea of statistics as 'key technology'. Apart from contributions in the general field of statistical theory such as Mahalanobis distance and the Rao-Cramer lower bound, there was a specific achievement in sampling theory. Mahalanobis's method of 'interpenetrating subsamples' greatly facilitated the design of cost-effective large-scale sample surveys. It paved the way for setting up India's National Sample Survey Organisation (NSSO) which regularly generates estimates of various parameters for the vast 'unorganized' sector in rural and urban India. A similar example is the method of crop-cutting surveys for estimating agricultural output. The Planning Unit of the ISI at Delhi served as the back office of the national Planning Commission.

Pune's Gokhale Institute of Politics and Economics (GIPE) championed the use of input-output methods in Indian economic analysis under the leadership of P.N. Mathur. There were also attempts to build input-output tables for the regions of India. This institute also has to its credit a pioneering study on poverty (Dandekar and Rath 1971). Together, these contributions helped improve the data base of the Indian economy.

CONCLUSION

I shall not attempt to summarize the discussion. India has nurtured a distinct intellectual tradition in development economics dating back to at least the mid-nineteenth century, a tradition that has later assimilated the heterodox element of Keynes for its purpose. The entire scholarly discourse surrounding India's programme of industrialization has led to rich insights into the functioning of the Indian economy. In the longer view, however, it is striking that the historical development problem of India is intact. If anything, the economic system has, in recent decades, become more complex, raising more serious issues of conceptualization.

There are perhaps two major challenges facing Indian economic analysis today. First, it has to find ways of integrating India's massive underbelly of petty production into macroeconomic analysis. Without this integration, the theory of India's agrarian economy, which points to the underformation of critical markets in labour and land, is at loggerheads with the conventional aggregates of macroeconomics (for example, aggregate output, employment, wages and so on) even when the latter are 'structurally' specified. The deep undercurrents of continuous change characterizing Indian economy seem to negate conventional binaries of rural and urban, agriculture and non-agriculture, and formal and informal (see Omkarnath 2012, Ch. 8). Second, India has to reorient its economics education in a way that dovetails Indian economic analysis with 'principles' and 'history' courses. At present, these sets of courses in academic programmes are pointing in disparate directions, to the disadvantage of all three. It is important to note that since India represents the quintessence of backwardness and human deprivation, any insight gained into its working is *pari passu* a contribution to development economics.

That India's experiment with development has had a rough ride is hardly surprising. But it can still take pride in its functioning democracy and in holding together as a vibrant nation. Meanwhile, in everything that India has failed at, there is a lesson for development economics.

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11. Latin American structuralism: the co-evolution of technology, structural change and economic growth

Mario Cimoli and Gabriel Porcile

INTRODUCTION

This chapter reviews some of the main contributions of Latin American structuralism (LAS) to the theory of economic development. The focus lies on the core macroeconomic concerns of LAS, namely the importance of structural change to sustain growth in an international economy characterized by technological asymmetries. There are many other aspects which LAS has addressed in its more than 60 years of reflection on development. In particular, LAS has given great attention to the interactions between the production and the social structures and to how these structures give rise to a political economy which compromises learning, investment and catching-up (Prebisch 1981; Pinto 1970, 1976; Sunkel 1978; Rodríguez 2007). LAS is also a school of thought that stresses historical research and emphasizes the need to take into account changes in historical conditions which require the reformulation of theoretical models (Bielshowski 2009; Ocampo 2013; Cimoli and Porcile 2011a, 2011b). However, these dimensions cannot be discussed within the limits of this chapter.

A central tenet of LAS is that a center–periphery system emerged as a result of the different intensity adopted by technological and structural change in different parts of the international economy. LAS admits, with Schumpeter, that development is qualitative change spurred by innovation and diffusion of technology. On the other hand, it emphasizes that such a process is highly uneven across regions. Technical and structural change concentrates in a group of counties, the center, with highly diversified and sophisticated economic structures; the periphery is represented by countries that are far from the technological frontier, whose production structures are less diversified and less technology-intensive.¹

It will be argued that LAS is part of a broader effort to produce new models of growth and development combining the Schumpeterian and Keynesian–Kaleckian intellectual traditions (see, among others, Cimoli 1988; Dosi et al. 1990; Araujo and Lima 2007; Ciarli et al. 2010). LAS shares with the Schumpeterian tradition the concern with structural change, innovation and diffusion of technology as long-run drivers of economic

¹ The center–periphery terminology is maintained throughout the chapter, which is consistent with the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) terminology and with the nomenclature used by regional economics and economic geography, but is also convergent with the North–South or developed–developing countries nomenclature (see e.g. Vera 2006). The important point is taking as a point of departure the stylized fact that in the international system countries coexist which differ widely in terms of capabilities.

development. In addition, LAS shares with the Keynesian–Kaleckian tradition the concern with effective demand, specialization patterns, and the need of policies and institutions to sustain and foster both public and private investments (León-Ledesma 2002; Ocampo et al. 2009; Blecker 2013; Ros 2001). The links between effective demand and the pattern of specialization and between the pattern of specialization and leads and lags in technology are at the core of a new strain of heterodox growth models.

The chapter first presents the main building blocks of the LAS macro model in the form of a simple set of diagrams describing the interactions between the technology gap, specialization, growth and income distribution. It then formalizes these interactions and offers a comparative dynamics analysis that highlights the policy implications of LAS. The final section presents our concluding remarks.

TECHNOLOGY AND THE PRODUCTION STRUCTURE

LAS may be seen as consisting of four closely interconnected building blocks. The first block is the existence of leads and lags in innovation and in the international diffusion of technology. The center consists of countries that are the technological leaders; the periphery is formed by the technological laggards. The slow and irregular diffusion of technology is considered by LAS to be the first proximate cause of why the production and trade structures differ between center and periphery countries (pioneer contributions are Prebisch 1950, 1955, 1981; ECLAC 1955; see also Rodríguez 2007; Verspagen 1993; Botta 2009; Rada 2007). The change in the technology gap depends on the rate at which the center innovates and the rate at which the periphery learns and absorbs foreign technology (catching-up; Fagerberg 1994). Behind the dynamics of the technology gap there is an institutional framework and a political economy which sustains those institutions. It suffices for the objectives of this chapter to note that these differences can be captured by the concept of the National System of Innovation (NSI) or National System of Learning (see Freeman 1995; Metcalfe 2001; Narula 2004), discussed in other chapters of this book. The strength of the NSI – the set of institutions, firms and (public and private) agencies which invest, promote and coordinate the processes of innovation and diffusion of technology, defining the market and non-market incentives for learning – determines the relative velocity of innovation and diffusion in center and periphery, and hence the evolution of the technology gap.

The second block relates the technology gap to the production structure. The technology gap implies that the center produces a more diversified set of goods than the periphery, and that these goods are more technology-intensive. This happens for two reasons. Firstly, in the case of the most sophisticated goods, the periphery simply lacks the capabilities required for their production. Secondly, in the case of goods that both the center and the periphery can produce, the technology gap implies that firms in the periphery may have higher unitary costs or lower quality. The productivity and quality gaps curb the competitiveness of periphery firms, reduce their share in the domestic and international markets – particularly in high-tech goods and services – and constrain the growth of effective demand. The periphery will be competitive only in goods which are at the lower end of the technology ladder: simpler goods and commodities which are intensive in natural resources or cheap labor (Reinert 1995). The periphery relies on static

comparative advantages, while the center relies on dynamic comparative advantages associated with technological capabilities.

Causality does not go exclusively from the technology gap to the production structure. As has been shown by the Schumpeterian literature, technological learning is localized and strongly related to what the country actually produces. Capabilities are developed through various learning mechanisms that depend on the experience accumulated by firms and countries; various forms of learning explain this, such as learning by doing, learning by using, learning by investing and learning by exporting, among others (Bell 2006). The accumulation of capabilities does not take place in a vacuum but within the limits and stimuli provided by this structure. Certain structures are more conducive to technical change than others – in Schumpeterian terms, they entail higher technological opportunities – and sustain higher rates of productivity growth. This implies a virtuous interaction in which technological catching-up encourages structural change, while the latter reinforces the process of learning and the fall of the technology gap (Cimoli and Porcile 2011b).

A note of caution is important at this point. LAS did not develop a micro theory of why the technology gap and asymmetries in capabilities are so pervasive and persistent in the periphery. But the macrodynamics of LAS is perfectly consistent with a Schumpeterian (evolutionary) microdynamics that stresses the barriers for diffusion and learning, as described in Dosi (1988) and Cimoli and Dosi (1995). It is also consistent with the view that markets and price signals are unable to solve the complex coordination problems posed by complementarities across sectors and increasing returns in technological change. The evolutionary literature uses the concept of ‘tacitness’ to design a context-specific, idiosyncratic, localized process of learning based on experience, trial and error, interactions and the mastering of routines of production which are inbuilt in people and organizations. Doing things and building capabilities are cannot be learnt from manuals; technology is not just information that can be bought and put into use immediately, but the outcome of an evolutionary process marked by uncertainty (Arthur 1994). This Schumpeterian micro is behind the Keynesian macro of divergence.

The third block of LAS relates the production and trade structures to economic growth. The basic assumption is that the share of each country in international effective demand depends on its patterns of specialization (Dutt 2002; ECLAC 2007; Cimoli et al. 2010). In open economies, the degree in which a country benefits from the expansion of effective demand (in the external and domestic markets) depends on the behavior of exports and imports. The income elasticity ratio – income elasticity of the demand for exports / income elasticity of the demand for imports – is a proxy that captures this ability of the country to participate in world trade and avoid the balance-of-payments constraint. The income elasticity ratio defines – as suggested by the balance-of-payments constrained (BOPC) growth models – the rate of relative center–periphery economic growth consistent with a non-explosive current account/gross domestic product (GDP) ratio in the periphery (McCombie and Thirlwall 1994; Gouvea and Lima 2010; Thirlwall 2011). This is a crucial link between the Schumpeterian approach (interactions between technology and structural change) and the Keynesian–Kaleckian approach (interactions between structural change and demand-led growth). Technology and productivity growth does not boost growth directly, but through changes in the pattern of specialization, which impacts effective demand through the income elasticity ratio. In other

words, except in the particular case of full employment, the impact of productivity growth on economic growth is mediated by its impact on effective demand.²

The fourth and last building block of LAS consists of the behavior of the labor market and income distribution. As it is less diversified, the periphery cannot offer quality jobs to its entire labor force. A large part of total employment remains in low-productivity activities or in subsistence sectors. This has a significant impact on income distribution: workers and firms in sectors and activities linked to the few sectors which are close to the technological frontier obtain high profits and (relatively high) wages, while workers in sectors that do not incorporate technology receive subsistence wages. This in itself is a source of economic inequality. In addition, underemployment worsens income distribution by reducing the bargaining power of workers and unions in the modern sector. Structural change – the diversification and the rising technological intensity of the production structure – allows the economy to shift workers out of the subsistence sector towards higher-productivity sectors. Structural change is the driving force that gradually exhausts Lewis's infinite supply of labor. By doing so, structural change contributes to raising the wage share in total income and favors income distribution in the long run.

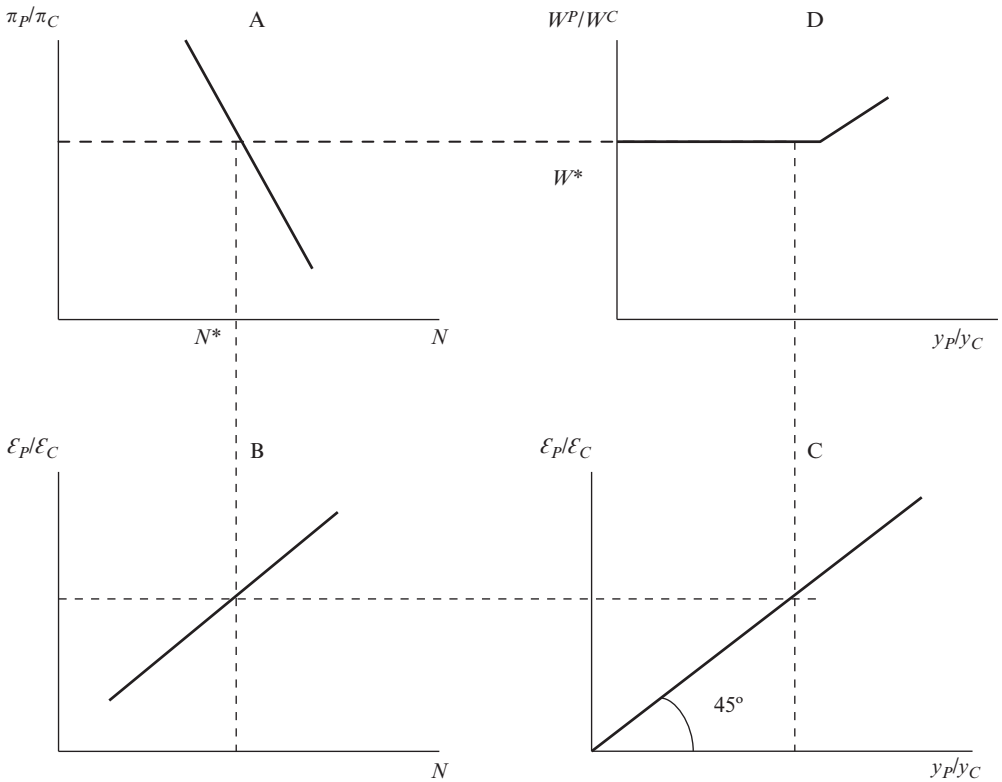
Structural change should be seen as a process that increases productivity and employment at the same time. It moves people to jobs where the productivity path is more dynamic; this has usually been identified with industrialization, but may take place within the agricultural, industrial or service sectors as well. The co-evolution between learning structural change and growth has a strong implication for income distribution for it shapes the intensity and quality of the demand for labor.

Figure 11.1 presents a set of four diagrams that illustrate the interactions between the four LAS theoretical blocks. Quadrant A shows the periphery–center relative productivity (π_p/π_c) in the production of different goods, which are ranked (N) in terms of increasing technological intensity. As N increases, the relative productivity of the periphery declines. The technological disadvantage of the periphery leads to lower relative productivity in goods which demand more sophisticated technological capabilities. A change in the technology gap shifts the curve of relative productivity in quadrant A to the right, allowing the periphery to reduce the productivity gap (for all or at least some of the goods represented by N).

The combination of relative wages (W^p/W^c), defined in the labor market (quadrant D; more on this below), and relative productivity (quadrant A), driven by the technology gap, allows for finding the pattern of specialization. Such a pattern emerges from the intersection of the curve of relative wages and relative productivity. For simplicity, the diagrams ignore differences in competitiveness arising from the quality of the goods and focus instead on unitary costs. The periphery specializes in goods for which relative productivity is higher than relative wages. The 'last' or more technology-intensive good that the periphery produces for a given technology gap and relative wages is N^* . The higher N^* is, the higher the complexity (diversification and technological intensity) of the production structure of the periphery.

Quadrants B and C in Figure 11.1 relate the production structure to the income

² This also implies that in the cases in which actual growth is below BOPC growth, autonomous investment (from the government or from the private sector) will always come up to bring both rates of growth in line (more on this below).



Note:

Quadrant A: relative productivity (π_P/π_C) as a function of the technological intensity of the goods, N .

Quadrant B: Ratio of the income elasticity of the demand for exports and imports, y_P/y_C .

Quadrant C: relative economic growth, y_P/y_C .

Quadrant D: relative wages, W^P/W^C .

Figure 11.1 The technology gap, specialization and economic growth

elasticity ratio ($\varepsilon_P/\varepsilon_C$), and hence to the periphery–center relative rate of growth (y_P/y_C) defined by the BOP constraint. The higher N^* and the higher the complexity of the periphery production structure, the higher is the income elasticity ratio and the higher the relative rate of growth of the periphery. The income elasticity ratio in quadrant B is translated into relative growth through the 45 degree line in quadrant C, as suggested by the Keynesian BOPC growth literature.

Finally, quadrant D shows that when relative growth increases, so does the demand for labor and hence relative wages. This closes the set of interactions between technology, production structure, growth and income distribution. At the beginning, when unemployment is high (there is a large reservoir of labor), the increase in relative wages is almost zero; but this changes when economic growth accelerates, putting more pres-

sure on the labor market and raising the quantity and quality of the demand for labor. The increase in relative wages reflects a tighter labor market, besides the positive influence that other variables – especially institutional variables, related to social protection or minimum wages – may have in the bargaining power of workers in the labor market.

This diagrammatic presentation of LAS allows for some simple exercises of comparative statics. A change in the NSI that heightens the periphery efforts at catching up will shift the productivity curve (π_p/π_c) in quadrant A to the right. For a given relative wage, this implies that the periphery diversifies and produces goods which are more technology-intensive. The pattern of specialization changes as the economy moves to a new N^* . This in turn changes the income elasticity ratio in quadrant B and the rate of growth in quadrant C. If the rise in the BOPC rate of growth is high enough, this may produce an improvement in relative wages. It should be observed that the diversification associated with a strengthening of the NSI may accelerate the rate of learning and further reduce the technology gap, sustaining the shift of the curve of relative productivity to the right. A virtuous cumulative process of growth and learning *à la* Kaldor may emerge, but this diversification would be limited by the increasing technological intensity of the goods as the country moves upwards on the technology ladder.

Other exercises of comparative dynamics are possible using the LAS building blocks. A positive shock in international demand, for instance, will shift the curve of the income elasticity ratio in quadrant B to the right. This would, in turn, have positive effects on growth (quadrant C), relative wages (quadrant D) and – by encouraging learning by doing associated with faster growth and diversification – the productivity gap (a shift of the curve of relative productivities in quadrant A).

A FORMAL APPROACH TO LAS

This section presents the ideas of the previous section in a simple formal model. The model is aggregate, but its macrodynamics is compatible with the Schumpeterian micro discussed above.

The evolution of the technology gap (first LAS block in the previous section) responds to the following equation:

$$\dot{G} = \alpha + \beta G - \gamma g \quad (11.1)$$

$G \equiv \ln(T_c/T_p)$ is the technology gap, equal to the natural logarithm of the ratio between technological capabilities in the center (T_c) and in the periphery (T_p). There are three components in the argument of equation (11.1). The first is the exogenous rate of growth of the gap (α). If – as is realistic to assume – the center invests more in science and technology than the periphery, this parameter will be positive. The third term is the Kaldor–Verdoorn effect, that is, learning by doing associated with higher rates of economic growth, which is also positive. The higher the rate of growth of the periphery (g) is, the lower (higher) the increase (fall) in the technology gap. The second term of the equation is the gap itself (G). The sign of β , however, is ambiguous.

The gap can be seen, from the point of view of the periphery, as an opportunity to learn from and take stock of the experience of the developed world to speed up the learning

process in the periphery. If this is the case, $\beta < 0$, and a higher technology gap helps the periphery to catch up. The magnitude of β (as the magnitude of α and γ) depends on the efforts of the periphery to learn; broadly speaking, depends on the NSI. However, in some cases β may be positive, when increasing returns in innovation and growth are very strong. When this happens, the initial technology gap reinforces the center-periphery divide (positive feedback favoring the center), instead of helping to curb it (negative or equilibrating feedback).

Economic theory does not offer a definitive answer about the sign of β . This is an empirical matter. But evolutionary micro level gives some hints about the factors that determine β . Firstly, as mentioned, the strength of the NSI is crucial: there is no substitute for domestic efforts at learning (industrial and technological policies). Secondly, the nature of the technological paradigm matters for catching-up. More precisely, the technological opportunities and tacitness that characterize the process of learning have a strong impact on the velocity with which pioneers innovate as compared with the velocity with which technology diffuses to the laggards. New paradigms in which the technological frontier moves very rapidly allow pioneers to reap great benefits from the existing knowledge base and therefore to increase the distance with the laggards (divergence). In such a scenario it is more likely that β is positive. On the other hand, if the technological frontier moves at a slower pace and there are plenty of opportunities to learn from imitation (reversal engineering, copying, negotiating the transference of knowledge with foreign firms or capturing a higher share of global research and development expenditures), then it is more likely that β is negative (the gap encourages catching-up).

A third approach to catching up is to assume that the relationship between the existing gap and the intensity of international technological spillovers is non-linear. For low values of the gap, an increase in the gap is a stimulus for learning in the South. However, for high values of the gap, any increase in the gap becomes an insurmountable barrier for the South. If the gap is too high, the South simply does not have the capabilities that are required for learning from the leaders. This introduces a non-linearity in the analysis: with the gap international spillover rises up to a critical level of the gap and then declines. The implications for growth and structural change of non-linearity are not analyzed in this chapter (see Verspagen 1993 for a discussion of this scenario).

As regards the second block of the model (linking the technology gap to relative growth), it should be recalled that the model assumes a univocal relationship between the technology gap and the production structure; and therefore with the pattern of specialization. A lower technology gap means a more complex diversified economy, which in turn implies a higher income elasticity ratio. Therefore, the elasticity ratio is a function of the technology gap G : the periphery is more capable of expanding domestic production in response to the expansion of both domestic and external demand when the gap is lower and the economy more diversified.

Formally, the long-run equilibrium rate of growth of the South (g^F) depends positively on the rate of growth of the center (g^F , which defines the expansion of global effective demand) and negatively on the technology gap (G , which influences the degree of diversification of the South and hence the share of global effective demand, which is captured by periphery production):

$$g^E = g^F - \tau G \quad (11.2)$$

For the periphery to move to its equilibrium rate of growth, investment and labor supply should be endogenous and cannot pose a persistent supply-side ceiling to growth. Steindl (1952) argues that innovation follows investment like a shadow. In this model the causality goes on the other way round: growth opportunities are opened by technological change, and this produces the incentive to invest. Whenever the effective rate of growth (g) is below the equilibrium rate (g^E), the periphery will raise autonomous investments and accelerate its rate of growth. Formally:

$$\dot{g} = \varepsilon[g^E - g] \quad (11.3)$$

Using (11.2) in (11.3):

$$\dot{g} = \varepsilon[g^F - \tau G - g] \quad (11.4)$$

Figure 11.2 shows how the equilibrium values of the rate of growth and of the technology gap are determined, assuming a negative β .

The isocline GG represents combinations of G (technology gap) and g (effective rate of growth) that keep the technology gap in equilibrium, while the isocline gg gives the combinations of G and g that keep the effective growth rate constant. With a negative β , the equilibrium in point A is stable.

Exercises in comparative dynamics illustrate the impact of changes in the parameters of the system on growth and technological capabilities. First, assume that one country changes its NSI giving more room to investments in education, R&D, industrial policy

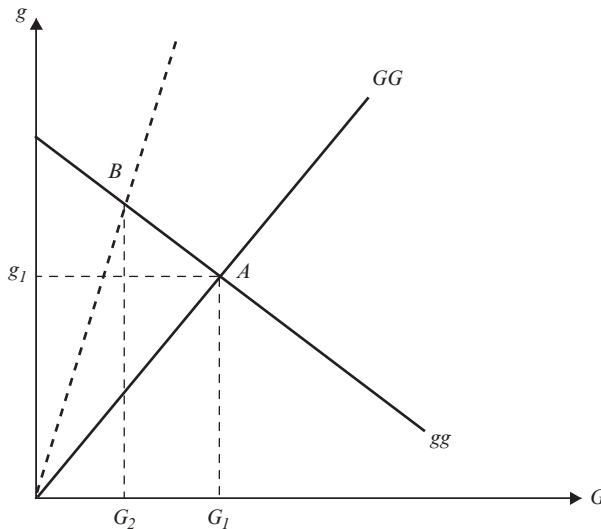


Figure 11.2 Effect of a new industrial and technological policy

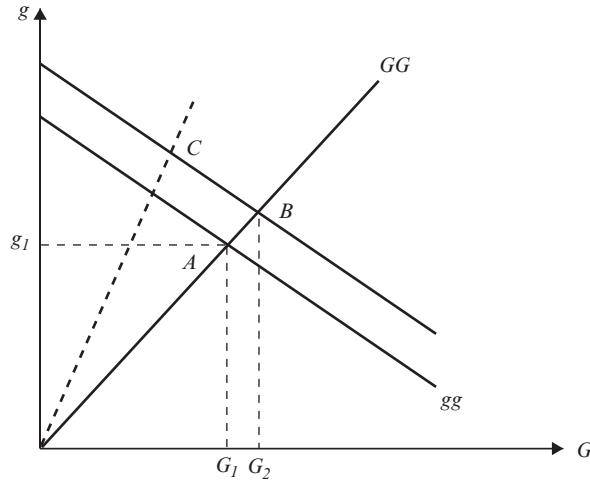


Figure 11.3 *Commodity lottery: the effect of an exogenous shock on international demand*

or active negotiations to spur the transfer of technology. As a result the value of β will increase in absolute terms and the slope of the curve GG will be higher. The economy moves from A to B . During the transitional dynamics, the technology gap is falling and diversification increases along with the rate of growth. The new equilibrium features a higher rate of growth and a lower technology gap (from G_1 to G_2). The change in policy therefore favorably redefines the production structure and the international position of the country.

On the other hand, a period of faltering public and private investment in science, technology and education, even if temporarily (in a context of an external crisis or as a result of an effort to reduce the budget deficit in the face of rising inflation), will reduce the magnitude of β , giving rise to the opposite effect. Secondly, not only policy shocks but also external shocks may change the equilibrium. An acceleration of autonomous innovation at the center – as in a period of change in the technological paradigm – raises α . This will shift the GG curve to the right. The new equilibrium (not drawn in Figure 11.2) entails a lower rate of growth and higher technological divide between South and North.

An interesting case is the impact of an exogenous shock on international demand, as represented in Figure 11.3. A pure demand shock – for instance, an exogenous rise in the income elasticity of exports – shifts the gg curve to the right and produces a new equilibrium (from A to B). There will be a positive impact of growth (higher g) but a negative impact on the technology gap (higher G , represented by the new technology gap in equilibrium, G_2). Therefore, when an increase in the growth rate is more associated with good luck in the ‘commodity lottery’ than with an increase in technological capabilities, the economy stabilizes with a higher technology gap.

Such a process may be halted if part of the new income produced by faster growth is invested in the NSI, which boosts the technological parameters (α or γ). In the latter

case, growing external demand and technological learning – faster growth with a lower technology gap – move hand in hand. Equilibrium is reached in point *C*, which features a higher rate of growth and a lower technology gap. This suggests that the industrial and technology policies are critical not solely in times of difficulties, but also in periods of favorable external conditions. Relying on the exogenous forces of the commodity lottery may favor growth in the short run but at a cost if it reinforces a pattern of specialization in sectors which are less technology-intensive.

CONCLUDING REMARKS

The focus of LAS development theory is on the co-evolution between the technology gap, structural change and the rate of economic growth, with its impacts on the quantity and quality of employment – and hence on income distribution. In many aspects LAS was able to advance key concerns and concepts recovered by recent thinking in growth and development. In particular, LAS should not be seen as a chapter in the history of economic thought but as an important part of a growing literature which fruitfully combines the insights of Schumpeter on structural change and technology with the Keynesian–Kaleckian insights on the role of effective demand and institutions in investment and income distribution.

LAS suggests that growth and income distribution, in a context of increasing returns and pervasive asymmetries in production and technological capabilities, give rise to falling behind in the periphery. Active policies for income distribution and strengthening the NSI are required for catching-up. Such policies are important in times of crisis; but they are also important to avoid a rise in the technology gap when a commodity boom alleviates the BOP constraint. The current pattern of specialization and its effects on the intensity and direction of learning and the accumulation of capabilities in the periphery may compromise long-run growth. In this respect, the micro analysis of technical change and institutions by the Schumpeterian school offers a natural complement to LAS emphasis on industrial policy to sustain growth and avoid divergence between center and periphery.

There is a rich research agenda for the future, exploring LAS insights and, more generally, the convergence between Keynes and Schumpeter. Agent-based models are particularly useful for the analysis of the type of micro–macro interactions which concern LAS. Although there is a place for aggregated macroeconomic models, micro-founded models with heterogeneous agents may be necessary to identify how certain changes in policies and macro-prices impact on learning and investment, reshaping the growth path. Topics of political economy in a context of structural transformation are another example of an issue that deserves much more attention in the future. A political economy built around very high initial levels of inequality in income, education and in the ownership of land and capital has strong negative implications for growth in the long run. A more detailed analysis of the links between the social and production structures, and how they contribute to shaping policies and political economy, is a promising area for future research in development economics.

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12. Revisiting the debate on national autonomous development in Africa

Issa G. Shivji

THE DEVELOPMENT DISCOURSE FROM NATIONALISM TO NEOLIBERALISM*

The struggle for independence in Africa was primarily an assertion of the humanness of the African people after five centuries of domination and humiliation of the slave trade and colonialism. Amílcar Cabral described it as the process of a 're-Africanisation of minds' or 're-becoming Africans'. National development became the passion of politicians and the 'great expectation' of the people. In the vision of the more articulate nationalist leaders like Julius Nyerere of Tanzania, the independent state had a double task, that of building the nation and that of developing the economy. The state in Africa, Nyerere argued, preceded the nation, rather than the other way round. Thus, from the start the national project was top-down and statist.

The colonial economy and society were anything but national. In the scramble for Africa, the colonial powers had divided the continent into mini-countries where boundaries cut through cultural, ethnic and economic affinities. This was made worse by the policy of divide and rule, leaving behind uneven development in an extreme form. Some regions were more developed than others. Some ethnic groups were labelled martial, providing a recruiting ground for soldiers; others were turned into labour reservoirs; some ethnic groups were characterized as 'intelligent' and moderately entrepreneurial as opposed to the rest who were inherently indolent and lazy. All were, of course, uncivilized, uncultured, undisciplined pagans whose souls needed to be saved and whose skins needed to be thrashed.

The colonial economy was typically disarticulated, almost tailor-made for exploitation by colonial capital, linked to the metropolitan trade and capital circuits. Extractive industries like mining predominated. Plantation agriculture existed side by side with subsistence peasant cultivation, all concentrating on one or a couple of crops for export according to the needs of the metropolitan economy. In settler colonies, large-scale alienation of fertile land left the indigenous to eke out a living from scraps of land and still pay taxes to the colonial state while providing labour to the settler farmer. Entrepreneurship and skilled labour was deliberately discouraged, if not suppressed, by legal edicts and administrative fiat. Instead, where needed to distribute metropolitan goods, build railways and ports or service the state and the settler town, skills were imported from the Indian subcontinent.

Different colonial powers left behind different forms and traditions of public

* This section is based on my public lecture to Cornell University, September 2005, titled 'The Changing Discourse on Development in Africa'.

administration, culture, cuisine, dance and education, elementary as it was, all concentrated in towns. The urban and the rural were literally two countries within one: one alien, modern, a metropolitan transplant barred to the native; the other stagnating and frozen in so-called tradition or custom. Neither the modern nor the traditional were organically so. Both were colonial constructs. No other continent suffered as much destruction of its social fabric through foreign imperial domination as did Africa.

These initial conditions on the eve of independence show that the nationalist project faced a formidable task on the morrow of independence. What is more, the state, which was supposed to carry out the twin tasks of nation-building and economic development, was itself a colonial heritage. The colonial state was a despotic state, a metropolitan police and military outpost, in which powers were concentrated and centralized, and where law was an unmediated instrument of force, and administrative fiat was more a rule than the rule of law.

The nationalist vision thus called for a revolutionary transformation not only of the economy and society but also of the state. A few nationalist visionaries attempted this, but none succeeded. The post-independence international context was no more propitious than the colonial one had been. Independence found Africa in the midst of the Cold War and the rising imperial power, the United States, for whom any assertion of national self-determination was 'communism', to be hounded and destroyed, by force if necessary, by manipulation and deception if possible. The early story of the gruesome assassination of Patrice Lumumba and the overthrow of Kwame Nkrumah; the continuing story of military coups, assassinations, and resistance to national liberation wars; and the civil strife in Africa, in most of which imperialism had a hand, bear testimony to what the former colonial powers and the rising imperial power could do to retain their collective global hegemony.

It is in the context of these conditions that African nationalists had to realize their dream of nation-building and economic development and to answer their people's 'great expectations'. Invariably, the agency of change was the state, since there was virtually no social class that could shoulder the task of national development. Fanon's characterization of the African middle class, which inherited power at independence, as an underdeveloped middle class with the mentality of a business person rather than that of a captain of industry, captured the essence of the post-independence ruling class (Fanon 1963).

Nor was foreign capital obliging, despite various protective laws and incentive schemes put in place by African governments. Invariably, nationalist politicians turned to the state. African governments of all ideological hues – from capitalist Kenyans through socialist Tanzanians to Marxists of various inclinations – resorted to the state for their economic programmes. The World Bank designed the post-independence economic programmes, contrary to the current propaganda from the West. In effect, it involved an intensification of monoculture agriculture for export, some enclaves of import-substituting industrialization, and throwing open the extractive and resource-based industries to transnational corporations.

The public sector expanded rapidly, financed almost exclusively by draining surpluses from the peasantry. State-run and managed marketing boards became the mechanism of siphoning off surpluses out of the agriculture sector. Much of the surplus found its way to metropolitan economies. The rest supported the state bureaucracy.

The state had to be manned. The colonial bureaucracy was almost exclusively white at

the top and immigrant in the middle. The education and health infrastructure had to be expanded, both for pragmatic and for political reasons. The Africanization of the civil service could not be resisted, nor could the basic welfare demands of the population. The provision of basic services by the state also served to legitimize the otherwise authoritarian rule of the political elite. The state bureaucracy grew rapidly.

Nationalism thus resolved itself into various ideologies of developmentalism. 'We should run while others walk', politicians declared. The academia was dominated from the North. Modernization, based on Parsonian pattern variables and Rostow's 'stages of economic growth', was the theoretical norm. These 'gurus' argued that post-independence economies were typically dual economies. There was the traditional sector, rural, unproductive, backward, lacking entrepreneurial spirit and governed by ascription or the 'economy of affection'. Development consisted in modernizing the traditional society, or, as Goran Hyden would have it, capturing the uncaptured peasantry (Hyden 1980). Political scientists thus looked for modernizing elites, from modernizing chiefs to modernizing soldiers, as political expediency dictated.

The dominance of the modernization paradigm was challenged by young academics coming out of post-independence universities. Where there was a relatively freer space, as in the Tanzania of the 1960s and 1970s, intense debates raged between modernizers and radical nationalists calling themselves African socialists or Ujamaaists or Marxists. Taking their cue from Marxism and the Latin American *dependencia* school, African progressives placed the history of the development of underdevelopment and the role of imperialism as the process of worldwide accumulation at the centre of their analysis and understanding. The traditional, they argued, was not quite traditional, nor the modern quite modern; rather, both belonged to the system of international capitalism which reproduced development in the centres and underdevelopment in the peripheries (Rodney 1972). Development therefore was not a process of changing 'pattern variables' or looking for modernizing elites but rather a process of class struggle. Inherited colonial societies called for fundamental transformation or revolutions. Controversies raged around issues of imperialism, class and state; around identifying the forces of the African revolution and the forces of reaction (Shivji 1976; Tandon 1982).

Meanwhile, the state became the site of power struggles as well as of accumulation. Radical nationalists who showed any vision of transforming their societies were routed through military coups or assassinations. A few who survived compromised and became compradors or tolerated imperial arrogance for pragmatic reasons. Everywhere, politics became authoritarian, whether in the form of one-party states or outright military dictatorships. Liberal constitutional orders imposed by the departing colonial states did not survive, as the underlying logic of the colonial despotic state reasserted itself (Shivji 1992).

The Cold War context and the hegemonic imperatives of imperialism expressed themselves in an utter intolerance of any radical nationalist or liberal initiatives. National self-determination and democracy were, and continue to be, the antithesis of imperialism.

State positions opened up opportunities for seeking rents. State and bureaucratic bourgeoisies typically exhibited all the vices that Fanon attributed to them. It is a 'little greedy caste, avid and voracious, with the mind of a huckster, only too glad to accept dividends that the former colonial power hands out to it'. It is incapable of 'great ideas or of inventiveness' (Fanon 1963, 141) and is 'already senile before it has come to know

the petulance, the fearlessness or the will to succeed of youth', said Fanon (1963, 123). Conspicuous consumption at home, a little investment in unproductive activities to make quick profits and a lot of stashing of funds in foreign bank accounts were, and perhaps still are, the typical characteristics of this class. Thus, very little serious domestic private accumulation took place. The local investment that did take place was public, by the state.

During the first one-and-half decades of independence, the African economies showed modest growth rates; modest in comparison to other continents but impressive given the initial conditions at the time of independence. Investment and savings ranged between 15 and 20 per cent of gross domestic product (GDP). Primary- and secondary-school enrolment expanded. Tertiary education, which in many countries literally did not exist during colonial times, was introduced. Medical and health statistics also showed improvement. However, this growth and development was unsustainable. It was predicated on the reinforcement of colonial foundations.

Growth in agricultural production was based on extensive cultivation rather than a rise in productivity through chemicalization, mechanization and irrigation. It depended heavily on exports of a few primary commodities traded in a hostile and adverse international market. The growth in the manufacturing industry was heavily of the import-substitution type, with few internal linkages and dependent on imports of intermediary inputs. Investment was largely public, while domestic private capital was stashed away in foreign countries. One estimate has it that by 1990, 37 per cent of Africa's wealth had flown outside the continent (Mkandawire and Soludo 1999, 11). To top it all off, foreign capital concentrated in extractive industries, which simply haemorrhaged the economy rather than contributing to its development.

During this period, the developmental state also borrowed heavily, whether for productive or prestigious projects. Petro-dollars accumulated by international banks during the 1973 oil crisis were loaded off in the form of cheap loans to developing countries. By the end of the 1970s, cheap loans turned into heavy debt burdens. By this time, the limits of the early growth were also reached, and the economic shocks of the late 1970s plunged African economies into deep crisis. Numbers fell, growth rates became negative, debt repayments became unsustainable, fiscal imbalances went out of control, and so did inflation. Social services declined, infrastructure deteriorated and, one after another, African governments found themselves at the doors of the International Monetary Fund (IMF) and the Paris Club pleading for mercy.

The 1980s, described by economists as Africa's 'lost decade', was also the transition decade, which marked the beginning of the decline of developmentalism and the rise of neoliberalism. In 1981, the World Bank published its notorious report, *Accelerated Development for Africa: An Agenda for Action*. It was certainly an agenda for Africa, set by the erstwhile Bretton Woods institutions (BWIs) with the backing of Western countries, but it had little to do with development, accelerated or otherwise. The report and the subsequent structural adjustment programmes concentrated on stabilization measures: getting rid of budget deficits, bringing down rates of inflation, getting prices right, unleashing the market and liberalizing trade. According to the World Bank, the villain of the declining economic performance in Africa was the state: it was corrupt and dictatorial, it had no capacity to manage the economy and allocate resources rationally, it was bloated with bureaucracy, and nepotism was its mode of operation. The BWIs

would not bail out the crisis-ridden economies unless the governments adopted structural adjustment programmes (SAPs) to get stabilization fundamentals right.

Balancing budgets involved cutting out subsidies to agriculture and social programmes, including education and health. Unleashing the market meant doing away with protection of infant industries and rolling back the state from economic activity. The results of SAPs were devastating, as many studies by researchers have shown. Social indicators such as education, medical care, health, nutrition, rates of literacy and life expectancy all declined. Deindustrialization set in. Redundancies followed. In short, even some of the modest achievements of the nationalist or developmentalist period were lost or undermined.

As the international situation changed with the collapse of the Soviet Union, Western imperialist powers regained their ideological initiative (Furedi 1994). The neoliberal package of marketization, privatization and liberalization now became the policy for, but not of, the African states. Good performers would be praised and rewarded with more aid, while the insubordinate and recalcitrant would be parodied and left to their own devices. While aid had always come with strings, now there was no attempt to disguise it. Political conditionalities were added to economic conditionalities. Policy-making slipped out of the hands of the African state as Western-financed policy consultants in their thousands jetted all over the continent with blueprints of policy on poverty reduction strategies and manuals on good governance on their computers, gobbling up some US\$4 billion annually. In 1985, to give just one example, foreign experts resident in Equatorial Guinea were paid an amount three times the total government wage bill of the public sector (Mkandawire and Soludo 1999, 137).

National liberation ideologies have been rubbished, and national self-determination itself has been declared *passé*. Africa is told it has only one choice: either to get integrated fully into the globalized world or to be marginalized. The spectre of marginalization haunts African elites. African leaders are left with few options: 'You are either with globalization or doomed!'. They have fallen in line one after another, even if it means disowning their own nationalist past. Former United Kingdom Prime Minister Tony Blair's Commission for Africa, which consisted of prominent Africans including one president and one prime minister, castigates the whole of the last three decades, which virtually means the whole post-independence period, as 'lost decades'. The primary responsibility is placed on the African state for bad governance and lack of accountability, totally ignoring the role of imperialism in both the exploitation of African resources and the support of non-democratic states when it suited their interests. Africans are told they have no capacity to think, and African states are told they have no capacity to make correct policies. The Blair Commission for Africa declares with a straight face: 'Africa's history over the last fifty years has been blighted by two areas of weakness. These have been *capacity* – the ability to design and deliver policies; and *accountability* – how well a state answers to its people' (Commission for Africa 2005, 14).

So policy-making, an important aspect of sovereignty, has been wrenched out of the hands of the African state. Two African scholars painfully observe: 'A major irony of African development history is that the theories and models employed have largely come from outside the continent. No other region of the world has been so dominated by external ideas and models' (Mkandawire and Soludo 1999, vii).

All in all, neoliberalism represents the defeat of the national project and the resurrection of the imperial onslaught. However, it is bound to be short-lived. Its limits are becoming clear, as the World Bank gropes for examples of successful SAPs, which shift every five or so years, from the Ghana of the early 1990s, through the Uganda of the mid-1990s to the Tanzania of today. But even today's Tanzania is showing signs of disowning Mkapa's blatant neoliberalism, if only rhetorically, as the new 'populist' president settles in the seat of power.

African scholars, as I said, are beginning to revisit the national project, some with nostalgia, others for inspiration (Yieke 2005; Shivji 2005a). Whatever be the case, African progressive opinion must go beyond the ideologies of nationalism to discourse on different paths of development. One such path is national autonomous development, which I discuss next.

DEBATES AROUND NATIONAL AUTONOMOUS DEVELOPMENT

The conceptualization of national autonomous development (NAD) was present, although not always explicit, in the discourses on development during the nationalist period. To facilitate the exposition, I will first quickly look at the debates on 'development of underdevelopment' and Samir Amin's delinking theories. I will then take up more concretely the evolution of Tanzania's policy of 'socialism and self-reliance' under the Arusha Declaration of 1967 and its left critique. The discourse and debates of the 1960s and 1970s in Tanzania illustrate the potential and the limits of the concept of national autonomous development (for a review of the debates at the University of Dar es Salaam, see Shivji 1990).

Underdevelopment and Delinking

The proponents of the argument of 'underdevelopment' were quite successful in demolishing the modernization paradigms of the early post-independence period. Modernization presented the African economies as dualist or dichotomous: traditional-modern, rural-urban, civil-customary, and so on. The underdevelopmentalists showed that what appeared as dual and dichotomous was in fact integrated in a single system of world capitalism. Furthermore, it had developed historically as a relationship between the metropolitan centres and the colonies. Independence by itself did not end this relationship.

The strength of the underdevelopment discourse was to show the historical process of the development of underdevelopment and expose the linkages of the African economy with imperialism. Its weakness lay in its strongly structuralist and economistic bias. It did not quite succeed in bringing out the way in which imperialist relationships were internalized in the social relationships within national societies and therefore failed to discern the processes of the reproduction of underdevelopment. Very often, therefore, underdevelopmentalists missed out the politics of imperialism and nationalism, thus sounding somewhat abstract and excessively critical. Its second weakness was that it did not clearly present an alternative model of development. In sum, if one may be allowed to simplify

somewhat, the underdevelopment discourse was strong on the history of development of underdevelopment but weak on the politics of the development of development.

Samir Amin's theorization on delinking, on the other hand, had a more subtle and nuanced presentation of underdevelopment based on the accumulation model of the centre and the periphery. Amin proposed a four-sector analysis: (1) production of the means of production; (2) production of goods for mass consumption; (3) luxury production and consumption; and (4) exports. The autocentric model characterizes the centre, where the determining interlinkage is between sectors 1 and 2. The extraverted model, in which the determining interlinkage is between sectors 3 and 4, governs the periphery. It follows therefore that the alternative path of development would be based on developing the interlinkage between sectors 1 and 2 (Amin 1990a, 7–8). The movement from the periphery to the autocentric model is of course a question of concrete history and politics.

Those who critiqued Amin often caricatured his model of delinking as autarkic and mechanistic. This is obviously wrong. Amin emphasized that his delinking was not synonymous with autarky; rather the concept of delinking was to convey the idea that external relations must be subordinated to the logic of internal development (Amin 1990b, xii). Again, in his various writings, Amin does paint in broad strokes the class configurations that reproduce the periphery model, while positing class alliances that have the potential for delinking and moving towards an autocentric model of accumulation. Of necessity, these are abstract and somewhat generalized class characterizations, such as compradorial blocs as opposed to national popular blocs, and so on. However, Amin's theorization can be usefully deployed for both critiquing existing processes of underdevelopment and developing alternative paths of development in concrete conditions.¹ Next, I briefly discuss the Arusha model in Tanzania, which in many ways brings out the critical significance of the elements discussed above.

The Arusha Model

On the morrow of independence, Tanzania was a textbook case of a typical colonial economy. The smallholders who produced food for subsistence and cotton, coffee, cashew nuts and tea for export dominated its agriculture. The major plantation crop was sisal, the importance of which declined in later years. There were hardly any industrial

¹ For example, I find useful as a guideline Founou-Tchuigoua's summary of Amin's five essential conditions of the accumulation process that the local state or ruling class must have control over for national autonomous development. These conditions are:

'(1) local control of the reproduction of the labour force, which presupposes that at a first stage state policy ensures that agriculture develops in such a way as to be capable of producing sufficient food surpluses at prices compatible with the demands of accumulation; (2) local control of the centralization of the surplus, which supposes not only the formal existence of national financial institutions but also their relative autonomy from the flows of transnational capital, guaranteeing national capacity to determine how it is invested; (3) local control of the market (largely in fact reserved for national production, even in the absence of high tariff or other protection) and the complementary capacity to be competitive on the world market, at least selectively; (4) local control of natural resources, which supposes, beyond formal ownership, the nation-state having the capacity to exploit them or keep them in reserve; in that sense the oil countries, which are not, in fact, free 'to turn off the tap' do not have this control; (5) finally, local control of technologies in the sense that, whether locally invented or imported, they can be rapidly reproduced without indefinitely relying on importing essential inputs' (Founou-Tchuigoua 1990b, 192–193).

plants beyond a few started after World War II. Most capital, intermediate and consumer goods were imported either directly from outside or via Kenya. The local entrepreneurial class was almost exclusively composed of immigrant Indians (popularly, though wrongly, called Asians in East Africa), who were largely involved in commerce. There was hardly any indigenous entrepreneurial class; in any case, the colonial laws on 'native credit' had deliberately discouraged its development.

The First Three Year Plan was based on the World Bank's report, which prescribed modernization of agriculture through improvement and transformation approaches and its further integration into the world capitalist market, the attraction and protection of foreign investments and import-substituting industrialization. Foreign investment did not oblige. Capital for the little import-substituting industrialization that did take place came from local Asian businessmen who branched out from commerce into industries, as well as from multinationals from Kenya which opened subsidiaries in Tanzania to capture the Tanzanian market behind protective tariff walls (Silver 1984). Capital-intensive rural settlements and large-scale ranches, opened with United States Agency for International Development (USAID) aid, were a disaster, as peasants and nomadic pastoralists reverted to their old ways of smallholder 'independence' rather than living as 'settlers' controlled by managers (Coulson 1982).

Main Pillars and Practice of the Arusha Declaration

It is not necessary to go into detail as to the immediate causes of the Arusha Declaration. Suffice it to say that in 1967, the ruling party (Tanganyika African National Union, TANU, then, now Chama Cha Mapinduzi, CCM) formally adopted its policy of socialism and self-reliance in the famous Arusha Declaration (Nyerere 1968). This was the high point of the nationalistic period but also the beginning of state authoritarianism and suppression of civil society.

The vision of the Arusha Declaration was woven around the ruling party, TANU's, ten tenets, or beliefs, which were summed up in the five major elements or pillars of the Arusha Declaration. These were: (1) public ownership or state control of the major means of production; (2) self-reliance; (3) rural development; (4) democratic participation of the people; and (5) the Leadership Code. Taken together, these elements could be considered to point towards some kind of national autonomous development, at least on the ideological plane. In political practice and economic policy, however, the development of post-Arusha Tanzania betrayed and undermined the very basis of national autonomous development, whether capitalist or socialist.

Public ownership

This was exclusively translated into state ownership, and some party zealots extended state ownership even to retail businesses, including butcheries and petrol stations. More significantly, though, the parastatal sector became huge, unwieldy and bureaucratic – with some 400 corporations at the peak – as the industrial sector expanded. Although agriculture was supposed to be given priority, in practice it was the industrial sector that received more money, much of which was in the form of project funds coming through foreign aid and loans. Thus, the industrial sector became a hotchpotch of projects often pushed through by the sales representatives of multinationals without regard to national needs. Useful and important projects, which would answer to the needs of building a national

economy, like the Friendship Textile Mill, sat side by side with white-elephant projects like the massive Kilimanjaro Airport. Worse, since industrial plants were put up project by project, there was no holistic and integrated plan to ensure the choice of appropriate technology (for example, labour-intensive versus capital-intensive) or to ensure upstream and downstream linkages with agriculture and the local market, respectively. To give just one example: the Friendship Textile Mill was built in 1968 with the help of a generous Chinese loan. A French company, Sodefra, which also took a minority share in the equity, designed the Mwanza Textile Mill (Mwatex) built in 1969. Both mills were large-scale integrated spinning and weaving mills based on the local cotton crop. The capital cost for Mwatex was more than one-and-a-half times that of Friendship; in 1975 Mwatex produced 1.5 million metres less than Friendship; whereas Friendship employed more than 5000 workers, Mwatex employed a little less than 2500, half of Friendship's labour force, while at the same time making less profit than Friendship (Coulson 1982, 282).

Most parastatals entered into joint ventures with multinationals or signed expensive management contracts. Studies showed that there was far more surplus drained out of the country in the parastatal sector than even in the private sector:

In 1973 the older firms generated domestic savings valued at 32 per cent of their capital stock, while the newer firms saved less than 4 per cent. Nearly 80 per cent of the value added in the older firms was retained within the country, but only 50 per cent of the value added in the more recent firms. (Coulson 1982, 280–281; see also case studies in Coulson 1979)

The parastatals thus became the vehicles for transferring surplus out of the economy. The net result was that industrial development in Tanzania under public ownership turned out to be greater integration into the world capitalist system, resulting in deeper imperialist exploitation. The scenario was repeated in other sectors as well. This could not be explained simply by the incompetence or ignorance of local management – all of which, no doubt, was there – but by the collusion and corruption of local decision-makers and bureaucrats with the multinationals.

Self-reliance

The Arusha Declaration proclaimed that the country could not depend on foreign gifts, loans and investments, because they were not available; but even if they were available, they would endanger national independence and the policy to build a socialist society. Yet, in practice, more foreign aid flowed into the country after the Arusha Declaration than before. In the six years before the Arusha Declaration, the country received foreign aid (external loans and grants) amounting to a total of TSh588.2 million. In the six years after the Declaration it received total foreign aid of TSh1730.3 million, that is, three times the amount from the pre-Arusha period. Eighty per cent of this aid came from the capitalist West, including the US-dominated world agencies; 17 per cent of the aid came from socialist countries, all of which came after the Arusha Declaration, and was almost entirely from China (Shivji 1976, 161). Over the 1970s, almost 40 per cent of Tanzania's public expenditure was covered by external resources. On a per-capita basis, Tanzania received US\$44 in aid in 1982, compared to Mali's \$36 and Malawi's \$24 (Founou-Tchuigoua 1990b, 203). Thus in spite of its declaration on self-reliance, the country became far more dependent after the Arusha Declaration than before.

Rural development

The Arusha Declaration somewhat obliquely recognized that the basis of Tanzania's development should be agriculture. The later paper on 'Socialism and Rural Development' (Nyerere 1968, 337) more explicitly set out how rural Tanzania should be organized to ensure the building of socialism. Noting that the traditional African society was based on the principles of working and sharing together and living as a community, the paper argued for organizing rural production on a communal basis in Ujamaa villages. The paper recognized the limits of the traditional community, particularly in respect of gender inequality and poverty, both of which should be overcome in rural Tanzania, which aspires to be socialist.

The paper also recognized the beginnings of rural differentiation, particularly in the areas growing cash crops for the market. Calling this 'capitalist agriculture', the paper quite explicitly portrayed the rich peasant or *kulak* economy in a negative light:

The small-scale capitalist agriculture we now have is not really a danger; but our feet are on the wrong path, and if we continue to encourage or even help the development of agricultural capitalism, we shall never become a socialist state. On the contrary, we shall be continuing the break-up of the traditional concepts of human equality based on sharing all the necessities of life and on a universal obligation to work.

This characterization of the rich peasant economy was later to develop into hostility towards rich peasants, who were condemned as *mabepari* (capitalists) and *makabaila* (feudalists). Thus, for example, the maize farmers of Ismani in Iringa and the wheat farmers of Basotu in Hanang and Karatu were subjected to so-called 'land reform' during the villagization era. The irony of it all was that these 'exploiters' were replaced, for example, in the case of the Basotu wheat farmers, by large-scale prairie farming under the bureaucratic management of the agriculture parastatal NAFCO (National Agriculture and Food Corporation), assisted by Canadian aid. Just as in the case of industries, the rural development projects, too, were heavily dependent on project-financing from Western, including World Bank, aid. In fact, the whole country was shared out among Western donors in the so-called Rural Integrated Programmes (or RIPS).

Rationalized and ideologized by the policy on rural socialism, the earlier experiments in village settlement were now transformed into the creation of Ujamaa villages, which was to be done by persuasion. Again, ironically, for various political reasons some of the experiments in 'rural Ujamaa', initiated from the bottom and predating the Arusha Declaration, were banned. The whole project became, like much else, top-down and statist. The gradualism and persuasion of the Arusha Declaration was soon given up, as party stalwarts became impatient. The party decided that living in villages was no longer voluntary; that peasants had no choice but to move to what were called development villages. Between 1972 and 1974, the government mounted a big operation, as more than 9 million rural inhabitants were resettled in some 8000 villages planned by town planners (URT 1994). Paramilitary troops used considerable force, and the population went through a lot of suffering. Under the guise of bringing people together so that they could be given services, all kinds of irrational bureaucratic decisions were made without consulting the peasants themselves who knew their terrain and environment better. The villagization only accelerated the crisis of export-oriented monoculture agriculture based

on a hand-hoe economy. By the end of the 1970s, the economy entered its worst crisis. Politically, too, the state began to lose its legitimacy.

Democratic participation

The Arusha Declaration described Tanzanian socialism as democratic in a lofty language which no one could fault. The practice was anything but democratic. By 1967, the country was already a *de jure* one-party state. Just a year before it became a one-party state, it had abolished autonomous trade unions and replaced them with a state trade union. Following the 1971 *Mwongozo*, or party guidelines, which decried arrogant management, workers organized themselves spontaneously in wildcat strikes and acts of taking over factories. The state dealt with it by means of high-handed force using the notorious Field Force Unit. In his May Day speech of 1974, Nyerere bitterly condemned the workers' movement, which demoralized the working class. This was a clear signal that the Tanzanian state would not tolerate any bottom-up or independent movement or expression of even official ideology.

In 1972, under a misguided programme called decentralization, planned and executed by an American multinational, the local government system was abolished. The central-government bureaucracy was brought closer to the people. The decentralization was utterly bureaucratic, and there was virtually nothing about it that could be described as democratic or participatory (Mushi 1978).

In 1975 the party was declared supreme; in 1976 the semi-independent co-operatives were abolished to be replaced by state-run crop authorities, and by 1978 the last autonomous student body at the University of Dar es Salaam was banned, and a countrywide student organization under the hegemony of the party was established. Thus, the civil society was statized. Organizational hegemony was one of the ugly faces of Ujamaa politics, which disarmed the people, and thus, when neoliberalism struck, there was no organized force to resist it; rather the intelligentsia uncritically swung to the world of spurious non-governmental organizations (NGOs) and praise of civil society without regard to its contradictions (Shivji 1986). In sum, given Nyerere's own personal integrity and the credentials of a 'bourgeois democrat', as he described himself once, the polity could not be described as dictatorial, but it was certainly top-down, bureaucratic, oppressive and authoritarian.

The Leadership Code

Together with the Arusha Declaration came the Leadership Code, which barred a party or government leader from indulging in capitalist practices: owning a house for rental, having more than one income or directorship in private companies, or employing labour. Thus, unlike many other African countries, the independence elite could not openly use the state for private accumulation. Formally, the ratio between highest- and lowest-income earners in the public sector did decrease, yet this is not to say that the state bureaucracy was angelic. It did indulge in conspicuous consumption, and with the wearing-down of the initial Arusha euphoria and the expansion of the parastatal sector, corruption set in. The extent of private accumulation and aspirations became clear only in the mid-1980s when the former 'socialist' bureaucracy was first to trumpet and embrace capitalist practices. In the early 1980s, when then Prime Minister Sokoine launched his drive against economic saboteurs, it is rumoured that he sent a list of saboteurs in the cabinet

to Nyerere; 80 per cent of the Cabinet was on it. On seeing the list, Mwalimu exclaimed, 'How will I run the state if I were to dismiss all these?'.

Summing up the Arusha Model

In sum, the Arusha model had various ideological elements pointing towards and having the potential for national autonomous development. But its main author, ideologue and political leader did not have either the theory or the politics consonant with NAD. The only political leader under Nyerere who had some kind of a vision of NAD was the late Sokoine, who became Prime Minister in the early 1980s, at the time of deep economic and political crisis (Shivji 1993). However, he was killed in a car accident and did not live long enough to concretize his vision.

There was some credible critique of the Arusha model from the left on the university campus, deriving its premises from the underdevelopment, delinking and Marxist debates of the time. They posited a model of a nationally integrated economy with interlinkage between the agricultural and the industrial sectors on the one hand, and between producer goods and light industries producing for mass consumption on the other (Shivji 1976). Within the government, Abdulrahman Mohamed Babu, a veteran Zanzibari Marxist, similarly expounded ideas of nationally integrated economy. In his characteristic journalistic style, borrowing from the Chinese model, Babu expounded what he called seven great relationships, in each case identifying what he called the 'key link', thus:

- between town and country, key link – the country;
- between agriculture and industry, key link – agriculture;
- between heavy and light industry, key link – heavy industry;
- between producer goods and consumer goods, key link – producer goods;
- between food crops and industrial raw materials, key link – food crops;
- between mass goods and luxury goods, key link – mass goods;
- between internal and international markets, key link – internal markets.

While identifying the key links, Babu urged planned and proportional development of the components. However, Babu did not have Nyerere's ear, and in any case, he was dropped from the Cabinet in 1972 and soon after detained without trial for six years by Nyerere at the behest of Zanzibaris, who accused him of involvement in Karume's assassination.

The intellectual left critique on the campus did not have much influence either. It was miniscule and had no links with the people or influence to carry any weight. In any case, Nyerere had little regard for his own intellectuals.² His theoreticians, if you like, were the expatriate 'left' intellectuals, self-identified as democratic socialists.³ They were much

² For example, Justinian Rweyemamu, a brilliant Tanzanian economist who wrote *Underdevelopment and Industrialization in Tanzania: A Study of Perverse Capitalist Industrial Development* (1973), was at some point appointed Mwalimu Nyerere's personal assistant but found it difficult to reach Mwalimu past his personal secretary, the Fabian Ms Joan Wicken.

³ In a book edited by Mwansanu and Pratt, Pratt listed the democratic socialists as including 'Reginal

more policy advisers, rather than theoreticians of Ujamaa. Their limits were also the limits of the Arusha Model, to which I now turn.

From the standpoint of NAD, I shall point out four problems of the Arusha model at a general and theoretical level. Firstly, the Arusha model and Nyerere himself had absolutely no inkling about the need for and process of 'delinking' from the world capitalist system or imperialism. As a nationalist, Nyerere's ideological rhetoric often sounded anti-imperialist, but its implications in terms of the path of development were never clear nor appreciated. It is not surprising therefore that the Ujamaa 'experiment' was heavily underwritten by finance from the Western world, including the World Bank.

Secondly, the practice of the Arusha Declaration reinforced the extraverted colonial economy with its industrial and agriculture sectors tied vertically to the economies of the centre rather than integrated internally. Both the villagization programme and the import substitution or export-oriented industrial strategy, at least in the initial period, were continuations from the late colonial period.

Thirdly, the whole development strategy had no deep understanding of the character and mode of accumulation necessary for NAD in the Tanzanian conditions. For instance, the hostility to rich peasants who could have provided the nucleus for 'accumulation from below' was utterly misconceived. Much later in the 1990s, the Presidential Land Commission, which I had the honour to chair, tried to develop an alternative path of development based on the model of accumulation from below. It argued that the social agency for such accumulation would be the rich peasants producing mainly food for the local market and raw materials for industry, thus propelling the development of a nationally integrated economy. The Commission observed:

[T]he Commission recognises that there are forces within the peasant and pastoral communities capable of generating, accumulating and reinvesting capital in the rural sector. These forces develop spontaneously as a result of differentiation in the smallholder economy. In the literature, they are often described as 'rich peasants' or kulaks. We distinguish them from capitalist farmers. Unlike the latter, the former are not simply managers and supervisors but continue to work on their land. In the past, they were identified as 'real exploiters' and thus stifled and suppressed. We believe that at this stage of our development they are one possible agency of *accumulation from below* or a *national* agrarian and pastoral development, albeit capitalist. There is some chance that such type of development would be organic and integral to our society, national and democratic in character and sustainable in the long run.

We hasten to add that there is no guarantee that the rich peasantry would necessarily lead towards nationalist development for that depends on larger macroeconomic and social environment, both domestic as well as international, the investigation of which is beyond the Commission's terms of reference. (URT 1994, 138)

Fourthly, the whole Arusha process was a top-down, statist and authoritarian project. Understandably, it had no conception of the class character of the project, although the Arusha Declaration projected the vision of a classless society where there is no

Green, Goran Hyden, Helge Kjekshus, Bismarck Mwansasu, Jon Moris, Samuel Mushi, Cuthbert Omari, Cranford Pratt, Knud-Erik Svendsen, and of course, Julius Nyerere.' Among these there were no doubt some fine critical scholars, like Kjekshus and Mushi and Pratt himself, but their theoretical limits never allowed them to diagnose the problems of the Arusha model (Mwansau and Pratt 1979, 233, fn 3).

‘exploitation of man by man’. In effect, therefore, workers and peasants, in whose name the Declaration was proclaimed, were not part of the ruling bloc. Rather, the objective process set in train was one of compradorial state capitalism, with the local bureaucratic bourgeoisie as the ruling class. No doubt, Nyerere’s radical nationalism allowed him to be relatively independent in his foreign policy. His personal integrity and popularity helped to suppress some of the outrageous ambitions of the bureaucracy. No doubt, in the area of social services – education, health, water, and so on – Nyerere’s regime scored some successes. But these were not integrated in a model of accumulation whereby education and health would not simply be considered services, but necessary investment towards NAD. Thus, these achievements could not be sustained and were actually reversed in the 1980s. With neoliberalism, the state disowned its responsibility to educate, clothe, house, maintain and care for its people.

CONCLUSION

This is a subject which cannot be concluded: the aim is to restart a conversation on alternative paths of development as neoliberalism begins to wear down. Recently, African intellectuals have been returning to the nationalist project (Yieke 2005). This must not be left at simply ideological and political levels. We must return to the debates on the alternative paths of development. In this regard, I think the concept of NAD is a fruitful point of departure. Of course, we need to deepen and develop it along several dimensions. I will tentatively mention three, all at the level of political discourse, because ultimately, development strategy is a question of politics.

Firstly, we need to develop a deep understanding of the politics of the state and the politics of the people. In each of our concrete conditions, we need to move away from the generalized characterizations of the ruling blocs as compradorial and forces of resistance as ‘national popular’ to a more concrete and nuanced understanding of the class configurations in our societies. At a certain level, of course, generalizations are useful, but they have to be concretized, socially, historically and politically.

At a lower order of political discourse of change and transformation, I am suggesting we need to explore several shifts as compared to the discourse of the post-independence period:

- from political party to social movement;
- from vanguardist insurrection to mass struggles;
- from ideological struggles to insurrection of ideas;
- from top-down liberal democracy at the level of the state to bottom-up popular democracy at the level of the village; and so on.

Secondly, we need to revisit the Pan-Africanism of the immediate pre-independence period and bring it back to the centre stage of the African discourse. I have dwelt on this elsewhere and will not go into details here (Shivji 2005b). Suffice it to say that, while well-resourced individual African countries can mount credible development initiatives, they cannot individually resist the imperialist political assault. The Pan-Africanism that we need to resurrect, therefore, is political Pan-Africanism at the continental level, which

transcends regionalism, whether economic or political. Only thus can Africa resist the present-day imperialism called globalization. In short, the nationalism of the present era is Pan-Africanism.

Thirdly, there is no way in which Africa can seriously develop and maintain its independence unless it clearly and unambiguously disengages from imperialism. And, I believe, the shifting hegemonies at the world level are perhaps creating a relative space for Africa that needs to be carefully utilized. The recent move to greater independence from the superpower in Latin America is an interesting precursor worth learning from.

Finally, we, the African intellectuals, need to re-examine our own roles. Are we going to be politician-intellectuals or neutral scholars serving the state and imperialism, in one case consciously, in the other ignorantly? Or are we going to be public intellectuals, political enough to give expression to the hopes and fears of the masses, but intellectual enough to keep our distance from power-mongering?

The emergence of neoliberal NGO-ism and the consultancy culture, with their emphasis on policy – more ‘action’, less thought – and prescriptive prognosis, has taken a toll on our intellectual thinking, the result of which is that we have abdicated analysing and understanding the world. We cannot fight for a better world without understanding the world better. For that, we need to take a longer view of history.

As Africa emerges from the rude neoliberal diversion, it needs a critical mass of Pan-Africanist public intellectuals who would spark the ‘insurrection of ideas’ towards the struggle against new form of imperialism called globalization. This time around, the struggle is not so much to ‘re-become Africans’ (to use Cabral’s phrase in relation to the nationalist movement) but rather to resist being de-Africanized.

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13. Development as the struggle for liberation from hegemonic structures of domination and control

Yash Tandon

This chapter is based on Africa's struggle for liberation from imperial domination. Drawing from the writings primarily of Nyerere, Dani Nabudere and Samir Amin, it argues that 'development' cannot be reduced to economic categories – such as growth and gross domestic product or even, say, industrialization per se. These are important concepts, but they are limited in their understanding of the complex political-economic process of development. Worse still, they lend themselves to abuse by the ideologues of the imperial system. Policy prescriptions using these concepts are tools for enslavement, not development. This chapter draws the bulk of its evidence from the Economic Report on Africa 2013 of the UN Economic Commission for Africa. However, the chapter demonstrates that the Report's own evidence belies its own prescriptions. I argue that the problem is not the lack of investment in Africa; in fact, foreign direct investments (FDIs) are the source of the problems. The roots of the problem lie in the historically embedded structures in Africa and their reproduction over the last 50 years, which the Report fails to address.

The global system has become tyrannical. People from Africa cross deserts and seas to death-defying emigration as refugees. I use the Palestinian concept of *Nakbah* (catastrophe) in a broader context to describe what has happened to the continent over the last 100 years of colonialism and occupation. True development is liberation. This comes from struggle and resistance against the imperial system. The chapter suggests a strategy of 'decoupling' from capitalist-driven globalization as a necessary first step towards Africa's liberation. Mass consciousness among the people will lead to *Chimurenga* and *Intifada*. This is not just an Africa-specific story. Development is part of a global historical struggle.

DEVELOPMENT DEFINED

Growth is not the same as development. I define development as the struggle for liberation from hegemonic structures of domination and control over global and national productive resources (land, minerals, labour, science, technology and human creativity) and global production relations (the economic and social organization of production).¹ These are concepts borrowed from Marx, but I use them in a different – that is, neocolonial – context, of which Marx, naturally, had no knowledge. Thus, for our times, development

¹ I have reworded it 'productive resources' in order to deliberately identify natural resources, which are in any case implicit in Marx's concept. However, I use both terms here to mean the same thing.

from a historical and humanitarian perspective may be defined by means of the following formula:

$$\text{Development} = SF + DF - IF$$

where:

SF is the social factor – the essential well-being of the people free from want and exploitation;

DF is the democratic factor – the right of the people to participate in decision-making that affects their lives and livelihoods;

IF is the imperial factor – the right of a nation to liberation from colonial and imperial domination, which follows from the right to self-determination.

Drawing from Nyerere, Nabudere and Amin

Julius Nyerere, the founding President of Tanzania, was a great patriot, a visionary Pan-African, and a leader of the South. In the 1980s, he chaired the South Commission set up by the developing countries. The rationale behind the South Commission was succinctly summarized by him in five headings:²

1. Development shall be people-centered;
2. Pursue a policy of maximum national self-reliance;
3. Supplement that with a policy of maximum collective South–South self-reliance;
4. Build maximum South–South solidarity in your relations with the North;
5. Develop science and technology.

Using Marx's distinction between 'productive forces' and 'productive relations', the last of Nyerere's points roughly corresponds with the concept of productive forces and the first four with production relations. Vulgar economists oversimplify the relations between these two by stating what Marx never said, namely, that the economic base determines social relations. What they miss out is the dialectical relation between the two: they interact, one influencing the other. In fact, Marx went on to say that when production relations become stultified, it is class struggle at the level of social relations that is the effective agent for change.³ Without caricaturing Mao it is important to add that Mao clarified it further by saying that whilst in the long run economics determine social relations, in the short run 'politics are in command'.⁴ This is a rather brief – too brief – summary of a debate that has gone on for more than 100 years, but one that still remains salient.

Besides Nyerere, I refer the reader to two other outstanding Africans, both Marxists, who (among others) dwelt on this subject at great length. Dani W. Nabudere was a prolific writer.⁵ In *The Political Economy of Imperialism* (1977) he traces the history of capitalism

² These are written in his own handwriting on a plaque displayed at the South Centre in Geneva. For a brief introduction to Nyerere's writings and his contribution to knowledge and to Pan-Africanism, see Tandon (2014).

³ One of the best historical accounts of this dialectical relation between productive forces and production relations is the encyclopaedic four-volume study by Bernal (1954).

⁴ https://en.wikipedia.org/wiki/Mao_line.

⁵ See Nabudere (1977, 1980, 1990). These are only three of his voluminous writings spanning political economy, law, philosophy, culture and pedagogy.

from its early stage of primitive accumulation, through its mercantile period and ‘free trade imperialism’, to its industrial stage, and later to its development into monopoly capitalism and modern ‘multilateral imperialism’. He goes on then to offer a strategy on how the countries of the South might break from this stranglehold of imperial capital. In his *Rise and Fall of Money Capital* (1990), Nabudere goes through the history of money (as distinct from capital), analysing the distortions of the production system caused by the money system; critically assessing the contributions made by, among others, Smith, Ricardo, Marx, Rosa Luxemburg, neoclassical economists, Keynes and the Monetarists.⁶ He predicted the crash of global finance capital of 2007–2008, 20 years before it happened. Nabudere was not just an academic intellectual. For nearly 50 years (1964–2013) he was the leader of a Maoist revolutionary underground movement actively involved in the struggle for the liberation of his country, Uganda, and of Africa (see Appendix).

The other outstanding African Marxist is Samir Amin (2010 [1990], 2011). He has been writing for close to 60 years on global political economy, including the political economy of Africa and the countries of the South. In *Global History: A View from the South* (2011) Amin offers a useful modification of the crude periodization of world history into five ‘universal stages’ (primitive communism, slavery, feudalism, capitalism and socialism) into three stages (communitarian, tributary – of which feudalism in medieval Europe is one form – and capitalist). Amin draws from a deep knowledge of several writers, besides Marx, among them Fernand Braudel, Karl Polanyi, Edward Said, Andre Gunder Frank and Emmanuel Wallerstein. In his *Eurocentrism* (2011) Amin explores his disagreements with the contemporary ill-informed dominant development discourse. He traces the latter to the emergence since the European Renaissance of a Eurocentric worldview. Both these books contain great insights into the remarkable development of the productive resources⁷ (including science and technology) in the ancient world, and in particular China and India. ‘Europe’, he writes, ‘did not participate in the general development of the pre-modern system until very late, after the year 1000. Up until then it had remained a backward and barbarous periphery’ (Amin 2011, 55). This is not an attempt by Amin to discount the contribution made by the West; it is to locate it within a corrected historical perspective. This is very helpful for this chapter, since I wish to challenge the epistemological basis of much of the contemporary mainstream economic paradigm.

It is necessary to clarify that there are, certainly, areas of disagreement between Nabudere and Amin – especially on the details and sequencing of the strategy and tactics of the liberation struggle – into which I do not go here. However, this does not distract in the least from my agreement with their overall analysis not only of the complex realities of the South–North relationship, but also of the globalized production and socio-economic-political-cultural systems which produce asymmetries at all levels, from the production of goods to the production of knowledge.

⁶ Some of the most rigorous critique of Keynes is found in the pages of this book. The critique is still valid and applies to the kind of analysis done, among others, by neo-Keynesian Nobel Laureates Joseph Stiglitz and Paul Krugman.

⁷ In this chapter I use the terms ‘productive resources’ and ‘productive forces’ to mean the same thing.

ECONOMISTIC CUL-DE-SACS

One does not have to be a nuclear scientist to appreciate that there can be no economic growth without industrialization. The so-called newly industrializing countries – Brazil, Russia, India, China and South Africa (BRICS) – are cited in the mainstream economic literature as models of economic growth. The question is whether this growth produces development. Leaving aside the BRICS countries' serious deficiencies, here I focus only on Africa as an example. I argue that a purely economistic approach to development is a dead end.

EVIDENCE FROM UNECA'S ERA2013 BELIES ITS OWN PRESCRIPTIONS

In 2013, the United Nations Economic Commission for Africa (UNECA) produced its annual Economic Report on Africa (ERA2013) called 'Making the Most of Africa's Commodities: Industrializing for Growth, Jobs and Economic Transformation'.⁸ I was involved in its review process. Its first version was seriously flawed; it was based on the neoliberal dogma rather than African realities. It was then revised with further inputs from some neo-Keynesian economists. But the final version, mainly because of time constraints, did not completely break with the first. The resulting outcome – ERA2013 – therefore came out essentially as a compromise between these two 'schools' of economic theories: neoliberal and neo-Keynesian. This eclecticism is obvious to any serious reader. This said, ERA2013 does address the issue of industrialization seriously and clearly lays out the challenges African policy-makers face.

Its core argument boils down to two propositions: (1) that it is imperative for Africa to industrialize for its growth, jobs and economic transformation; and (2) that this is possible only through climbing up the value chain ladder using Africa's essentially commodity-endowed economies.

There is a powerful economic logic here. However, a close reading of the Report's analysis shows that the problems Africa faces are deeper than purely economic obstacles. Of course, these are important, and have to be resolved. But they, in turn, are rooted in something deeper than what a purely economistic or short-term policy approach can even begin to address. This 'something deeper' has two roots: (1) the historically embedded structures of dependence and domination; and (2) the reproduction of these structures for the last 50 years and continuing.

In other words, one needs to go deeper into questions such as who owns Africa's commodities and resources, who makes policies in Africa, where do the capital and technology come from, and who controls these and for whose benefit (see Tandon 1982b). Unless these historically embedded structures of dependence and dominance are seriously tackled – in fact, removed – Africa in the next 50 years will continue along the same path as the last 50. This chapter argues that it is politically imperative for these imperial

⁸ Available at <http://www.uneca.org/publications/economic-report-africa-2013>.

structures of domination and control to be destroyed as a precondition, as a *sine qua non*, to even economic – let alone social and political – development.

The ERA2013 provides valuable empirical data and insights as evidence to support this argument, even if it stays away (given its institutional constraints) from drawing this conclusion from its own analysis. Rather than trying to summarize the Report, I have opted for giving some direct quotes from it:

Following two decades of near stagnation, Africa's growth performance has improved hugely since the start of the 21st century. Since 2000 the continent has seen a prolonged commodity boom and sustained growth trend. And although growth slowed from an average of 5.6 per cent in 2002–2008 to 2.2 per cent in 2009, hit by the global financial crisis and steep food and fuel price rises, Africa quickly recovered with growth of 4.6 per cent in 2010. The continent's growth slipped again in 2011 owing to political transition in North Africa, but rebounded strongly once more to 5.0 per cent in 2012, despite the global slowdown and uncertainty. (p. 6)

After this 'good news/bad news' assessment, the Report lays out some hard facts on the ground:

Yet this impressive growth story has not translated into economic diversification, commensurate jobs or faster social development: most African economies still depend heavily on commodity production and exports, with too little value addition and few forward and backward linkages to other sectors of the economy. Indeed . . . the pace is too slow for African countries to achieve their social development goals, especially some of the Millennium Development Goals by the end date of 2015. (p. 6)

Having done so, the Report goes on to offer a strategy for Africa: 'If African governments want to speed up and deepen value addition of local production linkages to the commodity sector, and to embark on a commodity-based industrialization path, they must adopt a strategic approach and work closely with all stakeholders to formulate and implement industrial policy' (p. 12).

So, obviously, to the next question: which value chains to 'deepen', and with which stakeholders 'to formulate and implement industrial policy'? And here is where the problems begin. Take the example of the cocoa–chocolate industry, from its commodity form to its value-added manufactured product:

Developing countries' [not just African] contribution to value added in the GVC [global value chain] fell by half between the early 1970s and the end of the 1990s (World Bank 2008). In Africa, producing countries are excluded from control over global logistics and marketing, and from intermediate and final product manufacturing. (p. 138)

The Report amplifies this very important point:

Chocolate manufacturing is dominated by a few European and US transnational corporations (TNCs), such as Nestlé, Mars and Ferrero (Fold 2002). During the 1990s, these outsourced intermediate manufacturing stages, in some cases even standard chocolate production, to grinders. This enabled them to focus on their core business of product development, marketing and distribution, as well as on high value added products and markets differentiated by product quality and by social and environmental standards (Barrientos 2011). The only exceptions are smaller manufacturers like Ferrero and Lindt & Sprüngli, which remain vertically integrated to preserve commercial secrecy and tight quality control systems. (p. 139)

The domination of highly concentrated TNCs and their secrecy and control systems is clearly one of the major obstacles to African producers and manufacturers moving towards a higher value chain. The Report offers the following very useful further insight into the chocolate industry:

Two types of lead firms dominate forward linkages in the cocoa GVC: grinders and chocolate manufacturers. They control the links characterized by the highest value added and profitability: trading and marketing (Barrientos and Asenso-Okyere 2008). Supermarkets, which account for an estimated 54 per cent of the global chocolate retail sector, are trying to appropriate a larger share of the value added by selling their own-brand products. Increasing market concentration through mergers and acquisitions has characterized both grinders and chocolate manufacturers. Since the 2000s, a handful of grinders have dominated the intermediate stages of the cocoa GVC: Cargill, Archer Daniels Midland and Barry Callebaut. They control R&D [research and development] and technologies in food processing, and bulk logistics. This has created very high knowledge and capital barriers to entry. (pp. 138–139)

It is important to understand this. The problem, as they say, is in the detail. The cocoa–chocolate industry is a commodity-specific example. The following is a country-specific example, that of horticulture in Kenya:

Kenya's upgrading has been impressive in agro-products, as fresh-vegetable firms have moved into high value added exports. Underlying this are very high domestic capabilities to meet exacting standards, coupled with a very supportive policy framework that addresses every stage of the value chain. Success has been highly selective, however, as many smaller farms and exporters have failed to keep up with global market requirements and have exited the value chain. (p. 134)

This supports a study that I carried out on the horticulture industry in Kenya in 2009. It is a story of human tragedy as well as environmental disaster; more serious than the above quote from ERA2013 would indicate. Kenya is Europe's major source of cut flowers. The United Kingdom (UK) alone imported 18 000 tonnes of flowers from Kenya in 2006, up from about 10 000 tonnes in 2001. The industry (for that is what it is) draws water out of the Lake Naivasha, on an average approximately 20 000 cubic metres a day. As a result, the lake is dying. Officially 130 square kilometres, by 2006 it had shrunk to about 75 per cent of its 1982 size. At this rate, in another 50 years it would shrink to a patch of a muddy pool of dead water. The papyrus swamps that were the breeding grounds for fish have almost gone. Thousands of peasant producers and fisher folk have been alienated from their means of survival. The flowers that ten years ago were produced by hundreds of small producers are now produced by a handful of multinationals. People are facing severe problems of food and water insecurity. Into this already very fragile socio-ecological condition, the Alliance for a Green Revolution in Africa (AGRA) has made massive investments. AGRA is funded by the Rockefeller and Gates foundations. AGRA claims that it is providing Africa with the means to grow high-standard exportable food crops and flowers to help its development.⁹ It employs certified agro-chemical

⁹ AGRA is clearly an example of what some refer to as 'philanthropic colonialism' or 'conscience laundering' for a world oligarchy. It is interesting how the oligarchy embellishes its projects in Africa with respected high-ranking Africans. For six years the Chairman of AGRA was the former UN Secretary General, Kofi Annan. For more on 'philanthropic colonialism', see Harvey (2015).

crops under multi-genome patents. The objective of both foundations – or at least the end result – is plain to see: the control over Africa's plant biomass to generate super-profits for mega-chemical and seed corporations.

Take one more example, from the mining sector. The Report says:

Ghana has 13 large mining companies producing gold, diamonds, manganese and bauxite, and more than 300 registered small mining groups and 90 mine-support service companies. Large mining is dominated by foreign multinationals from South Africa, Canada, Australia, US, UK and Norway. Small mining is dominated by Ghanaians, largely as a result of the Minerals and Mining Act of 2006 that keeps it for locals . . . A worrying trend is the growing antagonism between small and large mining companies, as they compete for concessions and their operations. (p. 219)

Throughout the Report there are ample examples of 'value addition' to scale up product competitiveness in the global market. But value addition for the global export market – which has become almost a catch-all phrase for 'growth' – has created its own problems. As the Report says:

Once firms are inserted into a GVC, they have to meet very demanding market requirements – price, quality and lead times. Technical standards are also crucial when the markets are Europe, the US or Japan. 'Private standards' based on social and environmental sustainability apply to cocoa, coffee and tea as much as to less traditional agro-processed products . . . Indeed, supply chain bottlenecks for local commodities are hampering the competitiveness of Africa's processing industries . . . Supply chain bottlenecks are not the only issue. Costly access to finance and poor infrastructure cut across all case studies, and other issues include limited access to external markets, high cost environments, high import tariffs on inputs, shortage of skills, corruption and security. These areas affect the quality, cost competitiveness and lead times of African processing firms. (133–136)

The problems cited above are general and not specific to any commodity or any country. There is on top of all this, what the Report calls, 'tyranny of financialization' of commodity trading; information asymmetry; and capital-intensive commodity production. Says the Report:

Indeed, the entry of financial agents on the spot and futures markets and the resulting financialization of commodity trading have frequently caused these markets to move from a price-taking environment to one of market power, partly because they are highly concentrated and often laced with information asymmetry. Financial agents have become key players in driving speculation and herd behaviour, and have distorted commodity markets including upward shifts in coffee and cocoa prices and all-time low prices for cotton . . . This behaviour has left African countries more vulnerable to fluctuations in commodity markets, whereas artificially high prices for some commodities have reduced incentives for value addition. Promoting commodity-based industrialization could offer a powerful tool for African countries to tackle this 'tyranny of financialization'. Equally, production of many commodities is capital intensive, holding back employment and the distribution of their rents. (p. xxx)

And the problems are not limited to the tyranny of financialization of commodity trading, information asymmetry and capitalist intensity of production and marketing:

Skills shortages are often a binding constraint on developing industrial linkages in Africa. They hamstring local suppliers in upgrading operational competitiveness, meeting technical require-

ments, innovating, adopting world-class manufacturing practices and running supply chain and customer-management programmes. Backward linkage development to the hard commodity sector is particularly demanding of technological capabilities to compete with global suppliers. Building necessary skills requires coordinated support from other firms, the government and donors (p. xxx).

The question is how to engineer 'coordinated support from other firms, the government and donors'? It is naïve to think that donors would put forward money to create competitors against their own corporations, which supply donor countries' economies with cheap raw materials for their own industries.

EVIDENCE FROM OTHER SOURCES

Let us move away from the ERA2013 and examine evidence from other sources. In an excellent study carried out by the United Nations Conference on Trade and Development (UNCTAD) in 2007 on the least-developed countries (LDCs)¹⁰ it was found that most LDCs had opened up their economies to global trade and were highly integrated in the global economy, but they were not climbing the economic and technological ladder. The study covered 11 LDCs over a two-year period (2004–2006), including six from Africa, and four from Asia and Haiti. Out of the 24 value chains of LDC exports, upgrading occurred in only nine since the 1990s, and downgrading in 12, representing 52 per cent of LDC exports. The study of 155 firms in Bangladesh showed that there was no development of technological capacity in agro-processing, textiles, garments and pharmaceuticals. As for the much-touted myth that foreign direct investments are a means of transferring technological know-how, the study found that the FDIs have not helped LDCs much. The problem is not lack of opening up to foreign investors, but rather it is the quality of integration of transnational corporations (TNCs) into host countries' economies. Most FDIs concentrated on mineral extraction in enclaves with little spillover into the domestic economy and heavily weighted in favour of the suppliers of capital and patented technology, accompanied by an undervaluation of the labour power and natural resources of the South.

When I was at the South Centre (the intergovernmental organization of the South), the unit in charge of intellectual property and transfer of technology made a comprehensive study of this issue. The SC study showed that within the World Trade Organization (WTO) framework, the Trade Related Investment Measures (TRIMS) discourage local content requirements, thus killing effective industrial policy and learning, which is the basis for industrialization. The Trade Related Intellectual Property Rights (TRIPS) involve very high transaction costs and complex procedural requirements in implementation and enforcement. Furthermore, the developed countries drive hard bargains against the countries of the South in negotiating free trade agreements (FTAs) with them. For example, Article 11D of the intellectual property (IP) Agreement between the United States (US) and Cambodia in 1996 limits Cambodia's flexibility for its *sui generis* system for plant protection. In the Economic Partnership Agreements (EPAs) between the

¹⁰ Available at http://unctad.org/en/Docs/ldc2007_en.pdf.

European Union and the African, Caribbean and Pacific (ACP) countries the European Union (EU) has sought to include patenting for biotechnology inventions and plant varieties and legal protection of databases as part of IP rights, which go far beyond the requirements of WTO compatibility (see Tandon 2008).

Thus the problem is not lack of capital. In fact, FDIs create these problems. Through FDIs comes the rule of corporate capital – corporate technology protected by intellectual property rights and control over the globalized production processes – as the above examples from ERA2013 show. At the heart of the technology is innovation, and at the heart of innovation is the economics of knowledge production and dissemination. The Northern governments, aided and abetted by their corporations, have created a formidable array of national and international structures to enforce and sustain their domination in the area of technology. These include the Anti-Counterfeit Trade Agreement (ACTA), Global IP Centre (GIPC), the International Medicinal Products Anti-Counterfeit Taskforce (IMPACT) and Standards Employed by Customs for Uniform Rights Enforcement (SECURE). In order to secure legitimacy and enforcement instrumentalities, the North have smuggled some of them into the body fabric of intergovernmental organizations, for example, SECURE within the World Customs Organization (WCO) and IMPACT within the World Health Organization (WHO).

THE DECOUPLING IMPERATIVE AND SOME TRANSITIONAL MEASURES

I now return to one of the key recommendations of ERA2013 quoted earlier: ‘If African governments want to speed up and deepen value addition of local production linkages to the commodity sector, and to embark on a commodity-based industrialization path, they must adopt a strategic approach and work closely with all stakeholders to formulate and implement industrial policy.’ And so to the inescapable question: ‘Which stakeholders?’. The major and most powerful stakeholders are the globalized transnational corporations (with stakes in, for example, oil and minerals), big financial institutions (mostly Western), and the so-called donor community which has a vested interest in plying Africa with so-called development aid with strings attached (such as the Structural Adjustment Programmes). The challenge is not to ‘work closely with all stakeholders to formulate and implement industrial policy’, but to break away from these powerful stakeholders that have been sitting on Africa’s natural resources and cheap labour, enriching themselves and impoverishing the people of Africa.

It is not easy to break away from these dominant structures. But break away Africa must. It cannot be done by a reformist approach from within the structures of global economic governance or through abstract economic theories. Let us examine a recent experience in this regard.

At the 63rd session of General Assembly of the United Nations, its Chairman set up a Commission of Experts, headed by Joseph Stiglitz, to study the global financial crisis and make recommendations.¹¹ The Commission comprised some well-known economists

¹¹ ‘Report of the Commission of Experts of the President of the United Nations General Assembly on

of our time, many (indeed most) of them of neo-Keynesian persuasion. After a critical analysis of the global economy, the Commission made a set of ten recommendations as its 'Agenda for Systemic Reforms', essential for 'immediate global recovery'. The Report came out in September 2009. That was several years ago. Nothing is heard of it any more. Not a single recommendation has been followed up. Why not? It is clear that a deeply embedded corporate and state power structure will not allow even a reformist (let alone a fundamental) transformation of the system.

Since the system is unreformable at the global level, the only way forward for the countries of the South is to break away from it, to decouple from the global value chain (GVC). It is here that the ERA2013 might have been more imaginative. The Report has impressive diagrams showing the production and distribution value chains of a number of strategic agricultural commodities and minerals in Africa. However, its ideological metaphysics – that is, its commitment to an essentially neoliberal paradigm – came in the way of elaborating on how Africa could break away from the GVC circuits towards developing the local value chains (LVCs), and in parallel with them the regional value chains (RVCs).

LVCs and RVCs are revolutionary strategies, not reformist, for what they involve is a radical break away from the present globalized system of finance and production. Since there is no space to elaborate on this, I will give one or two examples. One is to nationalize foreign commercial banks. It should be clear that this is easier said than done. In 1969, to give one concrete case, the Ugandan government under its 'Move to the Left' strategy nationalized British banks, among other measures. Within two years President Obote was overthrown in one of the earliest imperialist interventions for regime change. More recently, in the case of Zimbabwe, after resisting Western sanctions for some 20 years, President Mugabe has suggested nationalizing Western banks and companies as a 'tit for tat' (his phrase). Whether he would carry this out remains to be seen; in effect it means the continuation of the third *Chimurenga*,¹² or to use another Palestinian concept, *Intifada* (meaning resistance).

Another example of innovative breaking away from the global value chain is to create a regional or African currency (in my other writings, I have suggested the 'Nilo') that is directly under the control of African governments; in other words, decoupling from the US dollar as a reserve and trading currency. That, too, is easier said than done, but not impossible. China is gradually moving towards developing the yuan as an alternative reserve currency to the US dollar. In Latin America, the sucre is still in its infancy, but it is gaining ground. The transitional measures towards creating a fully independent currency could include, for example, regional monetary agreements (RMAs) and flexible regional-bloc exchange rate regimes (ERRs). An example of an RMA is the Unit of Account for Preference Trade Area (UAPTA) created by the East and Southern African countries in August 1988. It was a mechanism for minimizing the use of hard currencies, and it also enabled member states' citizens to travel within the region without having to use foreign

Reforms of the International Monetary and Financial System', 21 September 2009. Available at http://www.un.org/ga/econcrisissummit/docs/FinalReport_CoE.pdf.

¹² The first *Chimurenga*, meaning 'revolutionary struggle' in Shona, was fought against British colonial occupation in 1890s; the second against the Smith regime in the 1960s and 1970s, and the third began in 2000 with the land reform.

currency. However, in June 1997, the UAPTA was discontinued. Why? The reasons are far from simple, for they are political as well as economic, external to Africa – including the World Bank–International Monetary Fund (IMF) imposed neoliberal policies – as well as internal contradictions within the member countries (Tandon 2012).

The above are transitional measures that are within the reach of African governments if they are able to work together at the regional and continental levels. Of course, if this is not possible – for lack of will or threat from the dominant imperial system – then people will take to the streets to demand their right to a decent life with dignity.

THE WRETCHED OF THE EARTH: THE GLOBAL *NAKBAH*

The global system has become tyrannical. The productive resources have developed astronomically during the last 50 years. But they are in the service of global corporate power and the kleptocratic elite in state power. Also, they have a destructive component: the weapons of war. The imperial forces use sophisticated drone technology to kill defenceless civilians from the air. Under capitalist and imperialist globalization in our times, millions of people are uprooted and displaced from their lands and homes. At its most conservative, 4.2 billion people (60 per cent of the current world population of 7 billion) are suffering global *Nakbah*.¹³ They are uprooted, desettled and abused. If they have jobs they are made to work to their bare bones for them and their families to survive. They are economic refugees in their own countries and in their own regions, from which escape is impossible. There is a tiny minority that dares to scale ‘Fortress America’, ‘Fortress Europe’ or ‘Fortress Australia’, but they risk death or a fate worse than death.

At the root of global *Nakbah* lie deep-rooted structural problems of capitalist and imperialist globalization, such as:

- Increasing misallocation of global resources, arising out of an intensified tendency on the part of global corporations to put profit before development and the environment.
- Increasing financialization of the economy; the huge dislocations between real values of assets and their collateralized prices are creating an increased risk of a systemic collapse. The subprime mortgage crisis in the US in 2007–2008 was only a trigger. There is a deeper crisis within the capitalist logic that is still being played out in countries like Greece, Ireland, Portugal and Spain.
- Increasing alienation of the South leading to ‘decoupling’ by those countries that can do it (India and China, for example, but only up to a point), as an insurance against the increased fragility of the global financial and economic system.
- Increasing trend towards Africa becoming recolonized by welfare and aid agencies; what can veritably be described as ‘welfare colonialism’.
- Increasing migration from the South to the North, and within the South from the poor to the rich countries.

¹³ *Nakbah* refers to the uprooting and expulsion of approximately 725 000 Palestinians from their homes at the formation of the state of Israel in 1948.

- Increasing individual violence, including terrorism, countered by increasing state violence at the national and global levels.

The biggest thing going in favour of the exploited and oppressed nations of the world is that imperialism's internal contradictions are intensifying at both the social and material levels. At the material level the development of productive forces has contradictory effects. On the one hand there are innovations which strengthen corporate and state power, such as engineering technology and increasingly sophisticated weapons of war and violence. On the other hand, there are those, such as in the area of communications and patent-free free software, that strengthen the ability of the masses to challenge the system. At the social level there is an increasing consciousness among the masses of the people that the system is deeply unjust and things cannot be 'business as usual'. Arising out of this there is a spreading resistance culture and largely non-violent struggles and different forms of organizations. But this is a vast subject.

CONCLUSION: FROM ADAPTATION TO RESISTANCE

In her Ralph Miliband London School of Economics (LSE) lecture Jayati Ghosh made an interesting distinction between resistance and transformation. She says:

Indeed, much of the popular protest that is evident today in various places is still essentially about 'resistance' rather than 'transformation', and involves rearguard action to stem the tide of brutal fiscal austerity measures that deny the social and economic rights of citizens within the existing economic system, rather than conceiving and putting in place alternative systems. (Ghosh 2012, 33)

This is probably generally true for both the North and the South. Nonetheless between the interspaces of resistance, there are early beginnings of alternatives – both in thought and in practice. At the local level, for instance, there are attempts by local communities of ordinary people to decouple themselves from the market-based iniquitous value system; they do not accept the present situation where everything is commoditized. Decoupling, however, is not the same as autarchy, which is neither possible nor desirable. At the heart of the contemporary civilizational crisis is a reductionist logic that values everything in terms of money. However, some communities are making heroic efforts at innovation. Their alternative approaches include the production of goods and services based on exchanges that do not involve money. Also, where 'money' is needed as a medium of exchange, such communities have created a kind of labour voucher system that is delinked from national currencies. These bold attempts at decoupling are still in their early stages.

But I agree with Ghosh. The main form of protest against the manifest inequities of the present globalized system is resistance. Has the time come for the world's teeming millions of displaced people to mount a global *Intifada*? Is the 'Arab Spring', along with the early manifestations of the 'occupation movement' in the West, a prototype or an early beginning of a global *Intifada* against global *Nakbah*? These are questions which only the future can answer.

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APPENDIX: THE MAOIST MOVEMENT IN UGANDA AND THE DAR ES SALAAM DEBATE

This Appendix is in response to Erik Reinert's editorial suggestion:

given the academic scope of the book I was hoping there could be a reference to your role in the Dar es Salaam debates (and at Makerere). In my view that was an African parallel to the CEPAL [United Nations Economic Commission for Latin America and the Caribbean, ECLAC]/Prebisch etc. movement in Latin America, and I would like to make that point in the introduction (if you agree to the parallel). Both were in a sense post-colonial movements (economic colonialism only in Latin America). (E. Reinert, pers. comm.)

The Uganda Maoist Movement was founded in 1964 at the Gulu Conference of the Uganda People's Congress by certain members of its radical youth wing. It soon went underground after it was discovered that it was penetrated by the US Central Intelligence Agency (CIA). Very few people knew or know about its existence to this day. I did not know about it until I joined it in 1973 whilst I was teaching at the University of Dar es Salaam.

The 'Dar Debate' was a sequel to the appearance in 1970 of Issa Shivji's *The Silent Class Struggle in Tanzania*. It was a well-argued Marxist appraisal and criticism of Tanzania's socialist programme. The first person to critique Shivji was Peter Meynes, a lecturer at the Free University of West Berlin, followed by Mahmood Mamdani and, later, Dani Nabudere and myself and others. This unleashed an intense, often passionate, debate amongst revolutionaries and Marxists on the campus and outside the continent (among them, for example, Rohini Banaji from India). The debate was published by the Tanzania Publishing House in 1982 with an introduction by the veteran Zanzibari revolutionary, Abdulrahman Mohamed Babu (see Tandon 1982a).

Unknown to most contributors to the debate (including Shivji and Mamdani), the 'Dar Debate' was only a part of a parallel debate among the members of the Uganda Maoist movement working on a strategic political programme to unite with all forces within and

outside Uganda that were struggling against the military dictatorship of Idi Amin. Amin was installed into power by British and Israeli manipulations within the Uganda military following President Milton Obote's nationalization of British banks. The big question for our movement was: who is the principal enemy? Amin and the 'national ruling class', as some of our comrades argued, or imperialism, as Nabudere and I (among others) argued? A number of Latin America revolutionaries were also grappling with the same question during those years.

The Amin regime was supported by the Empire. When Amin invaded Tanzania in 1978–79, and Tanzania rebuffed the invasion, the United Kingdom accused Tanzania of aggression and threatened to raise the matter in the United Nations Security Council.

Amin was finally toppled in March 1979. Nyerere was then working with the political forces in Tanzania to organize an interim government that would take power in Kampala, pending elections. The interim government that was formed was the Uganda National Liberation Front (UNLF), whose leading force was Dani Nabudere. I was an original founder-member of the UNLF, and served (for a short period) as a Minister of State under President Binaisa. The UNLF government was toppled in a military coup in April 1980. We found ourselves in exile again. Our guerrilla force managed to liberate certain areas bordering Kenya and Uganda. However, we soon dissolved the guerrilla force (a matter about which I have written elsewhere).

These are the main highlights of a long story. I want to get down to the issue raised by Reinert: Was our movement 'an African parallel to the CEPAL/Prebisch etc. movement in Latin America'? Both, Reinert suggests, were 'in a sense post-colonial movements (economic colonialism only in Latin America)'.

For sure, both were or are 'post-colonial' movements. Of course, all comparisons are relative, since the context and the historical and social-political forces on the ground in Africa and Latin America are different. That notwithstanding, I would agree that there are 'parallels' between the CEPAL/Prebisch movement and our movement in Uganda (I cannot here speak of the whole of Africa). Uganda remains a neocolonial state. Its economy and its resources are controlled by global (mostly Western) financial and industrial corporations. Such is the case with most of Latin America, except Cuba (at least so far). So although the movements are 'post-colonial', both are still struggling to liberate their natural resources and financial-industrial infrastructure from imperial control and exploitation.

Economics is the other side of politics. Economics does not make sense without politics. It follows that at a general level, the situations in Latin America and Africa are not that dissimilar. As argued in the body of this chapter, whilst in the long run 'economics determine social relations', in the short run 'politics are in command'. Today, Latin America is way ahead of Africa in the continent's struggle against the Empire. We in Africa have a lot to learn from Latin American revolutionary forces.

14. The League of Nations and alternative economic perspectives

*Carolyn N. Biltoft**

THE UNCONVENTIONAL CHILD OF AN ORTHODOX MARRIAGE

The League of Nations may seem a peculiar entry in a volume dedicated to heterodoxy. The organization emerged from the Paris Peace Conference as a manifestation of, or an international advertisement for, the braided faiths of classical economics and liberalism. The League's paper trail certainly contains claims that the rule of law and free trade based on comparative advantage could together secure peace by assuring the greatest good and wealth for the greatest number. Yet, even though the League was born within a lineage of orthodoxy, it also provided an arena for discussing alternatives to classical liberalism. As the world's first permanent intergovernmental forum of its kind, the League gathered and brought into conversation a host of different nations and interest groups.¹ Whatever its initial intentions, it gradually became a zone where the claims of convergence continually and publically ran up against political and economic divergences.² Thus, the League piloted the working through of a question that continues to afflict multilateral institutions: should these bodies reflect or actively alter or redress the distribution of power and resources on the global stage? It was in grappling with, though not resolving, this question that the League both reasserted and then slowly came to re-evaluate some of its founding precepts, especially in the economic domain.³

This chapter claims that beyond the narratives of success and failure, international organizations provide a historical laboratory for studying the ligaments connecting the international division of labor to the international balance of power. Furthermore, they provide a glimpse into the ways in which struggles to either preserve or restructure those ligaments often played out equally in the realm of ideology as in the realm of policy.⁴ To those ends, the following pages will first address how the League's efforts to promote the values of classical liberalism shed light on some of the fault lines of

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¹ In her recent study of the League's Economic and Financial Committee Clavin (2013) cleverly refers to the League in this way as a 'multiverse'.

² For broad discussions of the role of trade in preventing rather than encouraging wealth convergences, please see Reinert (2008).

³ The definitive accounts of this subject include Fior (2008), Clavin (2013) and Decorzant (2011).

⁴ For a discussion of the power of financial ideology in informing (or mis-informing) policy please see Blyth (2003).

those doctrines. Secondly, the chapter will explore how the League weighed promises of laissez-faire's long-run prosperity against counterclaims that social and political dissatisfaction with gaps in wealth and power could undermine international stability in the short run. Finally, it will focus on how the League's open discussions of wealth distribution helped to incubate the seeds of alternative trade and development theory after 1929.

TROUBLED INHERITANCES: LEGACIES OF LIBERAL CAPITALISM

In 1918, when post-bellum leaders sought blueprints for securing and maintaining peace, they drew from a ready-made canon. A long tradition including Immanuel Kant, Frederic Bastiat, Norman Angel and then Woodrow Wilson claimed that free trade and political liberties were like water to the oil of war. Within this context, World War I came to signify an aberration set against the century of pacific liberalization that had supposedly preceded it (Pitts 2009; Mehta 1999). While this storyline offered a soothing formula for reconstruction after 1919, it was riddled with hyperbole, as economic and political freedoms had never been fully or universally secured at any time or place before 1914. The long nineteenth century had been one of state- and empire-building everywhere, with violence enacted against the marginalized at home and the colonized abroad (Arrighi 2010). As states pursued the priorities of power consolidation, protectionism often attended the limited growth of representative government. In other cases, political discriminations and injustices walked right through economic open doors. Similarly, the war had escalated to such an extent precisely because it grew from political rivalries deeply rooted in global economic competition, territorial expansion and the armed extraction of resources (Hobsbawm 1987; Sluga 2013).

So, the distinction between freedom and despotism, laissez-faire and intervention, and pacifism and jingoism, was never so neat and tidy in practice as in rhetoric. From its growth in the eighteenth century, new state proponents of liberalism immediately had to reconcile the professed values of freedom and equality with practices of wealth (and poverty) creation, such as slavery and colonialism, that ran counter to those ideals (Manent 1994). Even where liberal philosophies fomented political revolution aimed at toppling hierarchies, they did not restructure wholesale the economic order of things. Rather, what came were acts of reframing. For example, Adam Smith and David Ricardo together provided a new temporal horizon for economic equality. The gains of specialization within and between societies would eventually elevate the wealth of both men and nations. As for imperialism, new theories devised by the likes of J.S. Mill simply added paternalism to the gradualism of convergence (Sullivan 1983).

After the war, these same rhetorical devices permeated discussions of how to construct peace, with a heavy emphasis on rights and freedoms both political and economic. However, the Treaty of Versailles itself included punitive terms for the defeated powers, the continuance of empire and the construction of a geopolitical order in favor of Great Power interests (Maier 1975; Andelman 2009; Henig 1995; Steiner 2007). It was in this mixed context that figures such as the American President Wilson and others called for the creation of a permanent international organization to provide cartilage to lessen

friction at the joints between states.⁵ However, where liberalism served the creation of the League, it also created a host of classical contradictions. In this way, the question of the scope and meaning of ‘equality’ became a constant point of contention. The League’s organizational structure, consisting of a Council of mostly Great Powers (with limited rotating seats for lesser powers) and the General Assembly, weighted some states more heavily than others. Often challenges to the global political status quo first came in the form of resistance to the League’s bureaucratic structure and procedure. Yet, because wealth was a premier determinant of political weight, delegates also used the public forum to air objections to what they considered unfair economic advantages. As the League’s various organs responded to each challenge raised, at times the body reasserted the classical line and at other times it explored experimental policy suggestions and theories. Of greatest interest here is the League’s attempted resolution of conflicts surrounding the question of raw materials and international trade. This thread provides direct insight into the League’s hybrid legacy of orthodoxy and heterodoxy.

UNEQUAL ENDOWMENTS: COMPARATIVE VERSUS ABSOLUTE EQUALITY

The 23rd article of the League’s Covenant called vaguely for ‘the equitable treatment for the commerce of all Members of the League’. Patricia Clavin (2013) has recently argued that this treading lightly marked an attempt to avoid stepping on Great Power interests. Yet whatever the article obfuscated, it also opened the door on efforts to translate equitable treatment into lines of policy. Economic matters eventually came to occupy one of the organization’s central focal points. For example, a multi-year discussion around the linked issues of raw materials and free trade first appeared in the League in 1920. During one Assembly session, the Italian representative, T. Tittoni, made a controversial statement: ‘If the war has fulfilled the expectations of those who desired the triumph of liberty and justice in the political sphere, it has completely failed to satisfy those who desired justice and equality in the sphere of economics’ (League of Nations 1921, 178). For Tittoni, justice and equality in the economic sphere was linked directly to the question of access to those raw and primary materials necessary for fueling industrialization and feeding industrial societies (*ibid.*, 72). Yet, as one set of experts later put it, coal bins simply were not located in every room of the extensive mansion that nature built for mankind (Whitton et al. 1936). The question was how nations could meet their growing natural resource needs, if they were not naturally auspiciously endowed. The debate in the Assembly quickly became heated, with resource-poor states aligned against resource-rich ones, which demonstrated how quickly claims of economic inequality could lead to conflict.

Given the gravity of the question, the League set up a committee to investigate the nature of the problem and possible solutions. In 1921, the published report on raw materials identified protectionism as the primary obstacle. As the influential Norman Angel

⁵ As Mazower (2009) has demonstrated, the origins of the League were entwined with a longer history of imperialism and racism.

stated: 'Once we recognize that the essence of the difficulties in the matter of raw materials . . . is markets . . . certain clear lines of policy are indicated' (Whitton et al. 1936, 109). While Angel was not a member of the League, he gave voice to the consensus that open doors and the multilateral application of most-favored nation status would allow everyone to get what they needed in the marketplace. Still, however, there were problems that the 'free trade solution' could not solve simply or easily. For example, in order for the League to help combat protectionism, it had to address the related dilemma of imperial preference (Chase 2004). As Tittoni pointed out, the wealth of imperial powers had permitted them to 'acquire a monopoly of these materials outside of their own borders' (League of Nations 1921, 178). Yet, to raise the question of imperial preference – or to ask whether metropolitan states had a right to control colonial products via monopoly – could add fuel to the fires of anti-imperialism. Beyond this already sensitive point, however, the more dangerous issue was the bitterness that some powers such as Italy and Japan (and Germany after 1926) had due to their relative lack of colonies as compared to others. The Italian delegate had raised the question for precisely those reasons. Italy's own territorial ambitions had suffered when Wilson refused to honor the secret 1915 London Agreement that had promised Italy South Tyrol, Istria, Dalmatia, Libya, Eritrea and parts of Asia Minor. In defiance of its lot, the Italian government had already demonstrated annexationist ambitions during its 1919–1920 occupation of Fiume. For Italy, this question of raw materials became a way of advertising its frustrated aspirations on the global stage (Strang 2013; Ristuccia 1997; Baer 1976).

The League certainly saw the potential dangers attached to the question of raw materials and sought to address them, upholding where possible their commitment to economic liberalism on the one hand and the legitimacy of empire on the other. In pursuit of better infrastructure for encouraging those policies, the League created the Permanent Economic and Financial Committee (EFC) (Clavin 2013, Ch. 1). The committee tackled potentially peace-disturbing problems through gathering statistics, seeking advice from prominent economists and organizing conferences. Throughout its life the EFC attracted such notable names as Gustav Cassel, Bertil Ohlin, Gottfried Haberler, Ragnar Nurkse and James Meade, among others (League of Nations and Slutzki 1921).

Between 1920 and 1937 the League addressed the question of vital resources and their distribution among nations both through the work of the EFC and in the Council and the Assembly. These discussions provide a way of tracking the League's responses to the changing contexts of the global political economy leading up to and after the Great Depression. In 1920, there was still confidence that markets would naturally work things out, so long as states did not stand in the way. When the League held an economic conference in 1927, the final resolutions assertively urged a reduction in protectionism, citing it as the primary obstacle to the cooperation and thus collective wealth of nations (Clavin 1996; see also League of Nations 1927). After 1929, things were no longer quite as clear. Mass unemployment on the one hand, and the 'Russian miracle' of central planning on the other, together helped undermine faith in self-correcting markets. What is more, protracted economic crisis seemed to foment radical political regimes. As Fascism appeared on the scene, many became increasingly willing to consider that the time frame that markets needed to 'self-correct' might simply be too long, and too little too late.

Increasingly, experts in the League began considering the suggestions of those such as J.M. Keynes, who advocated strategic state intervention in fiscal and monetary policy to

provide heating and cooling mechanisms for domestic economies. The League gathered statistics, including on business cycles and the international monetary system, in an effort to achieve more clarity on the world crisis. One result of this work was that League economists began questioning gold standard orthodoxy. Certain affiliated experts pointed out how the same mechanisms that disciplined and constrained the international balance of payments could also prevent states from using monetary policy as a recovery tool (Clavin and Wessels 2004; Flandreau 2005). Yet, the League asserted that monetary compromises should allow economies to better engage in, not opt out of, free multilateral trade (Pauly 1997). The League launched research programs attempting to find ways to square the necessity of domestic intervention for recovery, with the continuance and expansion of international trade (Fior 2008). Supporting free trade became part of the strategy for resisting the political side-effects of economic nationalism. Calls for 'self-sufficiency' often came with demands for territories large and resource-rich enough to support domestic populations without too much dependence on the outside world (Eichengreen 1984; Keynes 1933). Japan invaded Manchuria in 1932 precisely on the grounds that it needed territory and raw materials (see Burkman 2008). This made the dangers of perceived inequalities painfully clear. Furthermore, as these claims sounded, another issue vexed the question of resources. The Great Depression put downward pressure on commodity prices, which exacerbated the overall world economic picture. When the economist Bertil Ohlin set out to investigate this problem under the League's banner, he discovered yet another potential minefield. Ohlin noticed severe imbalances in the prices of primary versus finished products on the world markets. In this way, manufacturing nations gained a seemingly permanent advantage over producers of primary goods. Statistics supporting this trend posed a challenge to traditional Ricardian doctrines of comparative advantage and the mutual gains of specialization. Knowing that such a discovery could awaken the ire of agriculture states and add their discontent to that of Japan, Italy and, increasingly, Germany was a great cause for concern (Endres and Fleming 2005).

The League dealt with the multi-front battle around the question of goods and resources in a number of different ways. First, the League supported a number of commodity control schemes as a way of providing non-tariff-based price supports (Anderson 1925; Edminster 1930; Hurstfield 1944). In this context, the League used selected intervention in the hope of moving against further protectionism, relying also on data that suggested tariffs did not in any case stabilize the prices of raw materials (Endres and Fleming 2005). As the Depression and so protectionism kept deepening regardless of efforts to the contrary, the League began to prepare for a second World Economic Conference to be held in London in 1933. The goal once again was to stimulate cooperation amidst the rising tide of economic nationalism. The conference was unable to secure the results it sought; not only did protectionism rule the day, but also Hitler withdrew from the League with his eyes set on reconquering lost territories in Europe and abroad (Clavin 1996).

After the World Economic Conference, Italy continued to talk about the disparities in resources between itself and larger and/or imperial states. Thus, British delegate Samuel Hoare suggested yet another inquiry into the matter of 'raw-material positions' around the world. In 1935 the League published a report saying that the resource situation was not so inequitable that free trade and a little international cooperation could not fix it. For example, it assured the world that only 3 percent of all-important raw materials came

from colonial territories (palm oil, copper and rubber) (B.S.K. 1937a, 1937b). Even there, very few vital resources were truly produced or distributed under monopoly conditions. Thus, if all imperial states practiced the widest open-door policies and the rest of the world lowered protective barriers, all parties could get what they need. However, this piece of assurance did not prevent the Italians from invading Ethiopia in 1935. Nor did it silence the concerns of primary producers over their poor terms of trade compared to industrial nations.

Decades ago, Douglas Rimmer (1979) argued that it was in the 1930s that disparities between the ‘haves’ and the ‘have-nots’ came to be seen as a central concern of international security. The League records not only reflect this growing concern, but also reveal how much of the League’s energy and resources went towards addressing them. During the remainder of its existence, the League kept fighting to secure multilateral cooperation while experts inside of the League tackled the issues via the medium of economic theory. Where wealth disparities could spawn violent conflict, the science of wealth and development was a topic of great importance and one too that seemed in need of some revision. It is to those theoretical revisions that we now turn.

THEORIZING THE GAPS: OHLIN, MANOILESCU AND NURKSE

Some of the most significant contributions to trade and development theory after 1929 came from figures affiliated with the League and so, too, privy to the contentious debates surrounding resource and wealth gaps. Bertil Ohlin, Mikhail Manoilescu and Ragnar Nurkse drew from their experiences in Geneva as they engaged in efforts to either modify or seek solutions beyond the classical canon. In each case, their work demonstrates how, rather than being a generator of consensus, the League acted both as a spotlight that illuminated the complexity of economic problems and also as an incubator of diverse responses and proposed solutions. The first of these figures, Ohlin, a highly valued member of the EFC and a figurehead of the Stockholm School of Economics, set out to rescue rather than question free trade. In 1931, Ohlin spearheaded the League’s investigation into the nature of the slump, entitled *Course and Phases of the World Economic Depression* (League of Nations et al. 1931). In this work, he helped to further refine the League’s official policy stance in the 1930s, which supported rationalization and selective domestic interventions but reasserted advocacy of freer trade (Clavin 2013). While Ohlin supported Keynesian macroeconomic intervention, he also hoped to reinforce a view that the international gains of specialization could address global imbalances. In his 1933 book, *Interregional and International Trade* (Ohlin 1967), Ohlin reworked trade theory not in a way that soothed Germany or Italy, but in a way that provided theoretical assurances that free trade could still work if practiced fully. Combining the work of his mentor Eli Hecksher with his own research, Ohlin extended David Ricardo’s theory of comparative advantage to identify factors beyond labor efficiency as key determinants of international trade patterns. Interestingly, Ohlin incorporated questions of scarcity and abundance into his model by demonstrating that a state’s natural endowments determine its efficient activities. He claimed that the primary factors of production – land, labor, and capital – together governed how nations specialized and engaged in trade. In other

words, states should import those products or services that supplied their scarce factors of endowment and should export those products that made use of natural bounties. Ohlin thus transformed the meaning of inequality, as a state's factors of endowment were not a disadvantage per se, but rather a formula for determining what to offer the world and what to take in return. Absolute advantage and so absolute equality were inefficient goals; what mattered was comparative advantage and juridical rather than absolute equality. In a certain sense, the theory can be read as an attempt to quiet demands for active intervention – through either protectionism or conquest – to close gaps between societies. In making capital a natural factor of endowment and raw materials secondary or input factors, the modification to Ricardo reinforced extant patterns of specialization and finance without offering immediate routes for diversification, capital formation or industrialization. It also placed territorial acquisition and capital and labor mobility outside of the model, which masked the political realities of colonialism, migration and foreign investment. Furthermore, the time frame that it would take for free trade to bring about greater collective wealth and well-being remained unspecified, located somewhere off in the future. While all models rely on simplifying postulations, Ohlin's particular assumptions lined up in interesting ways with the complex political contexts that were threatening the status quo both in the League and on the world stage.

Even modified classical trade theory did not open routes for stimulating development or bridging gaps in the short run; thus, other theoretical models for here-and-now wealth creation emerged in the 1930s. Mikhail Manoilescu had also been privy to the debates over trade and development in the Assembly, where he served as the Romanian Representative to the League. Like many in those years, Manoilescu became interested in the non-communist modes of intervention offered in theories of corporatism (Maier 1975). Manoilescu's work and influence on development economics has thus until recently disappeared behind his known sympathy to those (increasingly Fascist) governments such as Germany, who cried inequality in the League. Yet, regardless of his political persuasions, Manoilescu made theoretical contributions well beyond corporatism and is widely considered a pioneer of the theory of unequal exchange (Love 2009). Manoilescu observed that Depression-era protectionisms seemed to stimulate industrialization in agricultural societies. In seeking an explanation for this trend, he also engaged with Ricardian trade theory but in a way altogether different and for different reasons than Ohlin. Manoilescu claimed that when put to the test, Ricardo's all-important variable of labor efficiency tended to diverge, along with prices, between industrial and agricultural societies. Thus, calculating comparative advantage as based on efficiency and labor value did not automatically ensure that the gains of trade would be mutually beneficial. Further still, the opposite could be true: given the lower productivity of agricultural or primary industries, agricultural or proto-industrial nations could fail to escape vicious cycles of poverty and, in modern terms, underdevelopment. While Manoilescu believed that the productivity of agricultural and industrial labor would perhaps eventually converge, once again that time frame, even if inevitable, was too far off into the future, and societies such as Romania could not afford to wait. Thus, arguing for a form of import substitution, Manoilescu described how and why less developed societies should build barriers around key industries. Manoilescu further asserted that often places with raw materials and/or those that produced primary commodities did not have the capital to benefit from their own resource position. This left them vulnerable not only to the violent vicissitudes

of the market in primary products, but also to the extractive and exploitive activities of capital-rich powers (Manoilescu 1931). Thus, by selecting and protecting certain industries, poorer states could find a path not only to industrialization, but also to a better and securer relative position on the world stage. To those ends, comparative labor efficiency would not help to determine international trade patterns but rather help to identify which industries had the best chance of generating rapid development if sufficiently protected (Manoilescu 1931; Love 2009). Despite ample critiques, including from Ohlin, Manoilescu had made a serious contribution to the growing body of theory more attuned to active mechanisms of welfare and development than to wealth from the gains of trade.

One final figure, Estonian economist Ragnar Nurkse, served as an influential member of the Economic Intelligence Service from 1934 until the League's closure. By the time Nurkse joined the League, the EFC had turned its attention seriously not only to gaps in wealth and resources, but also to the question of living standards worldwide (Clavin 2013). Nurkse was, along with figures such as Paul Rosenstein-Rodan, Arthur Lewis and Gunnar Myrdal, a pioneer in an early development economics and sought to tackle the problems of persistent poverty, especially after World War II (Kattel et al. 2009). While at the League, Nurkse contributed to the *World Economic Survey*, the *Review of World Trade*, and other important publications, including the yearly *Monetary Review* (Kattel et al. 2009). During his Geneva years, Nurkse also began working through some of the ideas that he would later develop into a robust theory of development. While Nurkse certainly thought that international trade had a part to play in welfare, he saw domestic employment and the development of national economies and markets as indispensable prerequisites (Kattel et al. 2009). Nurkse's theories went beyond his contemporaries at the League, especially on the question of capital formation. Where Ohlin left capital as a naturally present or absent factor of endowment and Manoilescu left it as a vague necessity of development, Nurkse tackled the question of how poor societies could raise domestic capital through wise and balanced savings and investment in industrial and agricultural sectors (Kattel et al. 2009; Nurkse 1961a, 1961b). In this way, the question of equality pivoted neither on raw materials, nor necessarily on labor efficiency, but on a more complex understanding of how poverty had been created via the structures of the international system. For Nurkse, a theoretician who accepted some of the tenets of classical economics such as Say's Law, the challenge was how to infuse economic theory with measures for achieving equality and not just equilibrium. To those ends, he prescribed strategically expanding domestic markets and decoupling them from foreign capital and tight and inequitable global market structures.

Nurkse did most of this work on development after his time at the League. While at the League, however, it is clear that he tried to balance the organization's agendas of international cooperation and stability and his own concerns with how to kick-start progress in underdeveloped economies. One of the publications to which Nurkse contributed, *The International Currency Experience: Lessons of the Inter-war Period*, focused on the role that the international monetary system played in the stability of the world economic system. On the one hand, the text addressed the necessity of currency stability for healthy international trade. On the other hand, Nurkse emphasized the need for domestic monetary autonomy and sufficient credit to address concerns of poverty alleviation and development (League of Nations 1947). Another League publication where Nurkse left his fingerprints was that of *The Transition from War to Peace Economy: Report*. While

Nurkse was not the only author of the publication, it bears signs of his influence, as it focused on the ways in which post-war economic reconstruction would need to address questions of living standards, employment and economic development. Interestingly once again, a considerable portion of the text focused on the equitable distribution of food and raw materials on the one hand, and the poor terms of trade between the rich and the poor nations on the other. Yet, too, the text attempted to square these concerns once again with the League's insistence on the importance of freer trade (League of Nations Secretariat 1943; Clavin 2013). With a stalemate as to how to reconcile this decades-old dilemma, the document simply concluded with the suggestion that new international economic institutions needed to be created to tackle these problems and provide advice to governments (Pauly 1996).

A comparison of Nurkse's work at the League and his later work suggests that he perceived the possibility that the League's concern with international trade surpassed his own concern with serious questions of growth for impoverished societies. Perhaps in sensing the near impossibility of resolving the tension between the goals of trade liberalization and domestic development, after the war Nurkse did not seek an affiliation in any of the post-World War II (WWII) international institutions. Yet even though Nurkse went his own way, his work at the League both served as the template for the Bretton Woods agreement and also filtered into the structures and economic policies pursued in the group of intergovernmental organizations established at the end of WWII (Pauly 1996).

Whatever their differences, the works of Ohlin, Manoilescu and Nurkse each mark serious attempts to deal with the technical complexity of structural imbalances in the world economic system in the inter-war period. In a moment when those economic imbalances could and did have disastrous political consequences, each theory emerged within and in some way generated different political worldviews. Beyond the influences of specific theorists, the League of Nations' recruitment of diverse experts to address economic questions both signaled and also shaped the increasingly central role that economic advisors played in policy-making in the twentieth century. That legacy continued long after the League closed its doors.

CONCLUSION

In 1941, when Franklin D. Roosevelt and Winston Churchill finished drafting the Atlantic Charter, it was in some ways a revision of Wilson's Fourteen Points, modified for the post-World War II world. Along with familiar calls for greater equality and cooperation, there also existed lingering liberal tensions about how those principles might affect the privileges of the haves and the claims of the have-nots (Toye and Toye 2004). The fourth article of the Atlantic Charter contained a familiar refrain: 'All States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are needed for their economic prosperity.' Yet, the fifth article emphasized a new set of variables that had been absent in Wilson's first call to international governance, namely, the importance of 'securing, for all, improved labor standards, economic advancement and social security'. The United Nations thus came into being with a set of liberal recommitments to the wealth of nations on the one hand,

and the equality of nations and welfare of populations on the other. Just as the League of Nations struggled in articulating and addressing the contradictions of and conflicts between those two goals, so too would the United Nations. In both cases, economists and economic theories shaped the structure and content of the ensuing political debates.

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15. The Havana Charter: when state and market shake hands

Jean-Christophe Graz

INTRODUCTION

The Havana Charter is the Final Act of the United Nations Conference on Trade and Employment held in the Cuban capital in 1947–1948. It set up the status of the International Trade Organization (ITO), the third international economic organization planned for the post-World War II era alongside the International Monetary Fund (IMF) and the World Bank. Most scholars have neglected the importance of the Havana Charter as a milestone of many contemporary issues, such as the general framework requested for multilateral trade negotiations, their relations with full employment policy, commodity agreements, provisions intended to curb cartels and anti-competitive policies, as well as many early concerns still on the agenda of development policies.¹ The main reason for this lies in the stillborn nature of the agreement. In 1950, the United States (US) Congress declined to ratify the treaty, which in turn induced all the other 53 signatory states to abandon the attempt to establish the organization. What remained were the General Agreement on Tariffs and Trade (GATT), which was very similar to one chapter out of nine included in the Havana Charter, and some provisions included in other institutional arenas.

How does the study of the Havana Charter contribute to our understanding of the global economic order in which to situate alternative development policies? This historical inquiry helps us to forge a critical assessment on current potentials for change in various ways. First, regarding the international trading system, it sheds light on challenges raised by non-tariff measures in the current context of ‘deep integration’. With tariffs reduced virtually to non-existence, and more discipline imposed on important non-tariff measures such as quantitative restrictions, trade negotiations now revolve mostly around those aspects of domestic policies that are deemed to have an impact on trade. One only has to think of the heated debates surrounding the Transatlantic Trade and Investment Partnership and the Trans-Pacific Partnership negotiated between the United States and, respectively, the European Union and 11 countries around the Asia Pacific region. The issue has little to do with protectionism, even if it could be captured by protectionist forces, for the distinction between trade policy per se and state–market relations in general is considered to have become increasingly blurred. As Pascal Lamy, former Director General of the World Trade Organization (WTO), put it in the foreword of the 2012 World Trade Report focused on non-tariff measures: ‘Regulatory interventions

¹ For a detailed study on the International Trade Organization project by the author of this chapter, see Graz (1999). The ITO forms a part of the classical study of Richard Gardner (1969); see also, more recently, Zeiler (1999) and Toye (2003).

addressing market failures and international spillovers, with inevitable consequences for trade flows and investment, are here to stay' (World Trade Organization 2012). A careful study of the Havana Charter provides evidence that the comprehensive scope of non-tariff measures was already a key issue of the post-war international trading system. Even if the neoliberal drive of globalization has since had a deep impact on the WTO agenda, similar patterns of disputable issues remain.

Second, from a broader political economy perspective, many lessons can be drawn from the way the Havana Charter attempted to establish a mutually compatible set of policies blending free-trade objectives with recognition of state intervention in the domestic sphere and sectoral aspects of international trade. Commitments to restore a liberal economy after the war came up against a new form of state legitimacy that relied heavily on various instruments of the welfare state, Keynesian macroeconomic policy and development planning. This peculiar juncture between market freedom and the protection of international exchanges reflects in many ways the guiding principle of state intervention in classical mercantilism. In contrast to conventional accounts, a key criterion in the mercantilist understanding of the balance between freedom and protection of trade was the value in use, and more specifically its productive potential (Reinert 2008; Perrotta 1991). The Havana Charter helps us to translate this understanding into the contemporary debate. This chapter argues that the tension that exists when state practices are put to the test by the transnational drive of capitalism can be conceptualized as a form of transnational mercantilism (Graz 2004). In the post-World War II era, the external impact of these measures was expected to be contentious enough to trigger a bold attempt to normalize a wide range of state–society relations, considered for their impact on trade. The project did not survive US trade politics because it faced up to the impossibility of reaching a broad international understanding on the proper balance between market rules and state intervention.

The chapter first recasts the history of the ITO negotiations and their demise once the US Congress refused to ratify the agreement. It then pays particular attention to the principles and provisions of the Havana Charter with regard to development issues. The following section brings up the significance of the stillborn ITO from a critical international political economy perspective. The conclusion summarizes the lessons to draw from a contemporary point of view.

A SHORT HISTORY OF THE ITO PROJECT

The ITO is the third institution that should have been set up along with the IMF and the World Bank in the post-war era to implement the articulation between international security and economic and social welfare laid down in the United Nations Charter. Its institutional origins go back to the early post-war international economic and political commitments undertaken by the Allies in the Atlantic Charter and the American Lend-Lease policy. Article 7 of this agreement enjoined the Allies to open negotiations on a number of key normative issues for the post-war era as a counterpart to American military and financial support during the war. This article may be considered to be the first step towards reconciling the historic antagonisms between an open international economy and socio-economic functions of the states directed to welfare, full employment

and development objectives. From the outset, post-war planners from both sides of the Atlantic were deeply concerned by a comprehensive conception of international trade regulation, which blended free trade objectives with a recognition of important state interventions in various aspects of the economic sphere. Among them were some of the most distinguished scholars who wrote about the challenge in the late 1930s as well as after the beginning of the war (Toye and Toye 2004). One of the first documents on economic war aims produced by the group of experts established by the Council on Foreign Relations even before the American entry into World War II contains, for instance, the following comment:

It is doubtful if the idea of free trade now has very much appeal save to a small group of business men and economists. Nor is it likely that anything approaching free trade will be achieved for a long time to come. Rather we should stress the value to all concerned of a great interchange of goods, to be brought about in part by a removal of trade barriers and in part by positive measures of government policy.²

Though different in its content, the first exploratory draft of what was to become the Havana Charter reflects similar concerns. The 'Commercial Union' scheme was originally drafted by James Meade, then a member of the Economic Section linked to the British Cabinet Offices. It was subsequently circulated among British and Dominions officials between autumn 1942 and spring 1943. One of them produced a striking criticism on the issues at stake:

There is, I think, a fairly widespread illusion that those who are in favour of the Commercial Union scheme are supporting a policy of 'laissez-faire'. The choice is not in fact between 'laissez-faire' and planning but between international planning which, if successful, will leave room for a certain amount of internal 'laissez-faire' and the advanced degree of internal planning and control necessary to deal with a situation created by international 'laissez-faire'. The latter course must in my view eventually mean state socialism or something very like it.³

These statements give evidence of a deep concern about a mutually compatible set of both liberal and interventionist policies as the sole alternative to both fascism and communism. They explain the comprehensive agenda laid down for the first Anglo-American talks held in autumn 1943 at Washington on the trade-related questions raised by the Article 7 commitments. These discussions hinged not only on tariff-reduction formulas, trade preferences and quantitative restrictions, but also on their relation with subsidies, intergovernmental commodity agreements, international cartels, state trading and, finally, on the policy autonomy required for a proper implementation of macroeconomic instruments directed to employment and social objectives. Moreover, any commercial commitment depended on the conclusion of a satisfactory agreement on monetary and financial issues. Priority was given then to negotiations that eventually led to the Bretton Woods Agreements.

Contrary to the usual accounts privileging the hegemonic leadership taken by the United States, the ITO project was an outcome of close plurilateral negotiations even

² 'Economic War Aims: General Considerations, the Position as of April 1, 1941', memorandum E-B32, 17 April 1941, Council on Foreign Relations, Economic and Financial Group, 14.

³ W.L. Gorell Barnes to Lord President, 18 March 1943, Public Record Office, Kew (UK), CAB 123/221.

before formal international negotiations took place between 1946 and 1948. The harsh compromises sought in the negotiations resulted from strong supporters as well as arch-opponents at each national level. For instance, whereas in the United States the supporters were coalescing around capital-intensive, globally competitive industries and their financial allies, in the United Kingdom, the cluster came more from pragmatic considerations with regard to the huge balance of payment disequilibrium foreseen in the post-war era. The opponents included, on both sides of the Atlantic, radical labour, farm interests, a wide range of labour-intensive and poorly competitive small and medium-range industries, financial interests linked to the Sterling Area and the New York bankers gradually opposed to the Bretton Woods Agreements.

It was not until after the Anglo-American Loan Agreement of December 1945 that the American and British governments committed themselves publicly to establishing an International Trade Organization as a trade-off to financial assistance. Two more preparatory sessions were held in London and Geneva in 1946 and 1947 before the opening of the United Nations Conference on Trade and Employment in Havana from November 1947 to March 1948. These negotiations were not confined to the most powerful trading powers of the post-war era. More than 30 countries joined the negotiations at this later stage, most of them from Latin America under the leadership of Argentina at its peak of Peronist economic nationalism and independent industrialization. It is in this context that the so-called 'underdeveloped' countries launched a wholesale attack against the provisions drafted during the previous preparatory conferences. They saw them as too one-sided in favour of rich countries, without consideration for the emergent issues of economic development. As Clair Wilcox, head of the US delegation, later recollected, 'The most violent controversies at the conference and the most protracted ones were those evoked by issues raised in the name of economic development' (Wilcox 1949, 46).

This took place at a time when, in Washington, State Department free traders had gained influence after the death of President Roosevelt in April 1945. The Truman administration marginalized left-wing New Dealers who tried to put on an equal footing trade liberalizing provisions and guarantees directed at full employment and economic planning. The British were ready to go along with the American line to restore a liberal international economy, but would not abandon Imperial Preferences altogether (the system of discriminatory tariffs negotiated during the Ottawa Conference of 1932 in order to reinforce commercial and financial solidarity within the Empire). Moreover, the Labour Party, which won a historic victory at the general elections held after the end of the war, was keen on giving as much weight to welfare state commitments as to external adjustment constraints. Therefore, British delegates keenly defended all provisions able to render both objectives compatible. Most European delegations shared that perspective. Yet, it was clearly the Australians and New Zealanders who pushed further innovative thinking by making a parallel between full employment and economic development objectives. They also maintained that restraints to trade for implementing such a bold programme should in some circumstances be discriminatory. In this respect, the Southern Dominions often upheld 'underdeveloped' countries' demands. Trading powers such as the United States or the United Kingdom were ready to take into consideration special provisions for development purposes. But they deeply underestimated the weight of those demands and the extent of concessions necessary to reach compromises on each topic raised by this agenda. As Raul Prebisch, founding Secretary-General of the

United Nations Conference on Trade and Development (UNCTAD), later emphasized in his report to its first conference in 1964, 'the absolute necessity of industrialization for the peripheral countries had not been recognized or realized' (quoted in Toye and Toye 2004, 42). Yet, as will be seen later, such demands already went a step ahead of what free trade advocates on Capitol Hill would ever be ready to accept. This can be understood as a direct outcome of the 'procedural multilateralism' (Toye and Toye 2004, 18) that the United States privileged to devise the purposes and forms of post-war organizations by international negotiation between prospective members rather than by mere power and supremacy. This reversal of political fortune reflects an American hegemonic movement less centrifugal – and thus more polycentric – than usually assumed. In his recent study of the forgotten development foundations of Bretton Woods, Helleiner also emphasizes how in this context the early United States support for reconciling liberal economic order with the development aspirations of emerging Southern powers unravelled (Helleiner 2014, 258ff).

When in March 1948 the time finally arrived for signing the Havana Charter, many aspects of the initial momentum had already vanished. The concentration of the Truman administration on the intensification of the Cold War had significant implications for the fate of the ITO. However, a failure of the Havana Conference would be seen as a failure in the leadership that the United States claimed for the 'free world'. Facing the bulk of amendments forwarded at the negotiation table, Clair Wilcox, the chief of the US delegation at Havana, thought of adjourning the conference as the only remaining answer to the challenge. But Washington briefed him that 'a weak Charter was better than none'.⁴ In the context of the beginning of the Marshall Plan and the early North Atlantic Treaty Organization (NATO) planning, the Charter was not submitted to the United States Congress before spring 1949, and another year passed before hearings took place. The bill was never put to the floor of the House. Eventually, in December 1950, one could find, in the middle of a lengthy press release from the State Department about the GATT conference under way at Torquay in the UK, that the President agreed not to resubmit the ITO Charter to Congress. Because the Charter was never ratified by the US Congress, all the other signatory states abandoned the attempt to establish the organization.

The ITO's comprehensive agenda did not survive US trade politics. It faced the impossibility of reaching a broad international understanding on the proper balance between market rules and state intervention. The attempt to create a long-term comprehensive international organization gave way to ad hoc initiatives. Programmes such as the Marshall Plan and its various institutional extensions such as the Organisation for European Economic Co-operation (the forerunner of the OECD) offered an effective, though much more liberal, alternative to the Havana Charter. As far as the GATT is concerned, up to the 1980s it was devoted mainly to tariff reductions; GATT remained vague on non-tariff measures, and early attempts to tackle this agenda in the 1960s and 1970s yielded meagre results. It would take another decade before the 1961 UN-sponsored development decade would address development issues negotiated at Havana. Economic

⁴ 'If we get a Charter in March' and 'Possible adjournment of Havana Conference', Wilcox to Clayton, 29 December 1947; Brown to Clayton, 30 December 1947; Lovett to Wilcox, 3 January 1948; Brown to Wilcox, 5 January 1948; National Archives and Records Administration of the United States, Record Group 43 (Records of international conferences, commission and expositions), LF 47D-284 (international trade files), box 144.

development and regulation of trade in commodities became salient issues only in the 1960s after the creation of UNCTAD and would wait further for the oil crisis and the claims to a new international economic order to come to the forefront of the international agenda. Regarding full employment and other welfare provisions of the Charter, policies were incrementally implemented at the national level. It transformed national economic policy of state practice throughout the industrial world. But it remained mainly an issue bounded by the territorial state.

HOW DID THE HAVANA CHARTER CONSIDER DEVELOPMENT ISSUES?

The Havana Charter was the first ever attempt to reach a comprehensive intergovernmental agreement for underpinning a compatible set of precise rules to synthesize international liberalism with a high degree of policy autonomy at the domestic level. The aim was to promote both social justice and economic growth on a multilateral basis by recognizing conflicting needs amongst countries and social classes. It is in this respect that the ITO tried to strike a balance between freer trade, full employment and development needs. Among the delegations that took part in the negotiations, few could disagree with these broad goals, but many disagreed on the proper balance to strike on this comprehensive agenda.

Unsurprisingly, the final text of the Havana Charter was thus a patchwork of last-minute compromises on most issues related to this comprehensive agenda. Within the extraordinary complexity of the agreement, the acceptance of divergent needs of member states according to economic development objectives and planning policies became a critical issue, closely related to the extent to which discriminatory barriers to trade and the provisions for establishing intergovernmental agreements in primary commodities, and avoiding restrictive business practices from cartels, are accepted. While the balance between free-trade objectives and restrictions to trade for full-employment considerations was at the core of early post-war planning, the Havana conference set the pace for a broader international understanding on the proper balance between market rules and state intervention by including core issues of economic development. Chapter III of the Charter thus designed special provisions 'particularly for those countries which [were] in the early stage of industrial development'. Developing countries were successful in giving to it a very broad reading, including tariff preferences, quantitative restrictions and limitations of investors' rights. Let us have a closer look at each of those provisions pointing to forgotten routes for alternative economic development.

A key objective of American post-war planning regarding the international economic order was the abolition of trade preferences established by colonial powers such as Britain and France. This so-called 'open door' policy dates back to the late nineteenth century with the rise of the United States as a global economic power seeking access to world markets. The two key principles for non-discrimination in trade policy still at the core of the current trading system also lie at the core of the Havana Charter. Article 16 lays down an unconditional 'most-favoured nation' clause, which calls for members of a commercial treaty to grant one another the most favourable treatment which they grant to any other trading partner. This obligation is closely related to Article 18 on 'national

treatment', securing non-discriminatory treatment of imported goods once they have cleared customs so that foreign goods can be treated equally to domestic goods in the national economy. However, it is remarkable to note that most exceptions provided by the Havana Charter to those two non-discrimination principles were instigated on development grounds at a time when international development policy had hardly reached the official circles of the United Nations. Besides provisions for agreed customs unions or free trade areas taking into account early plans for European integration (Article 44), preferential tariff agreements were also explicitly imagined for development purposes (Article 15). Such provisions sheltering a market for particular industries or branches of agriculture parallel early plans for regional market integration and coordination related to import-substituting industrialization strategies. Finally, a third exception to the principle of non-discrimination concerned the use of quantitative restrictions in cases of serious balance-of-payments problems (Article 23). This clause was primarily related to the extreme situation of Britain, as well as European and other sterling area countries, in lack of dollars to import goods from the United States, which at that time produced half of the world output and where virtually all monetary reserves had been accumulated. Yet, the principle also anticipated ways for developing countries to pin down how to avoid chronic shortages of hard currencies turning into deep crises of balance of payments and sovereign debt defaults.

In addition to exceptions to the principle of non-discrimination, the use of quantitative restrictions along with tariffs for protecting new industries was a cornerstone of the principles of economic development embodied in the Charter. The American delegation was strongly opposed to quotas, identified as a betrayal to the price mechanisms at the basis of a market economy. In contrast, delegates from developing countries, supported by those from Australia, continuously highlighted that competitive price mechanisms could not be applied in a context of infant industries. At the end of strenuous negotiations, they were eventually successful in devising a so-called automatic approval (Article 13.7) whenever quotas would be applied to protect industries established during the war as compensation for the disruptions of the conflict (the so-called 'war babies' developed by many Latin American countries), or to support industries processing primary commodities and facing a sharp fall in exports resulting from new or increased trade restrictions imposed abroad. The Charter also included provisions for quotas in case the organization to be established considered them 'necessary . . . to promote the establishment or the development of a particular industry for the processing of an indigenous primary commodity' (Article 13.7.a.iii), as well as for any measure considered unlikely to be more restrictive of trade than permissible measures. Although entailing considerable margins for disputable interpretations, all those provisions unmistakably broke new ground for the principle of special and differentiated treatment for developing countries embodied in the GATT and, much later, in the WTO. Their extensiveness has no common measures with the broken promises of the Doha Development Agenda launched in 2001.

Together with the use of quotas, the investment provisions of the Charter became the most controversial issues under negotiation. In line with the principle of a mutually compatible set of both liberal and interventionist policies, Article 12 of the Charter was designed to recognize the role of private and public investment in promoting economic development, and to frame a favourable environment for the flows in capital and, at the same time, offer guarantees to borrowing countries against adverse interference in

domestic affairs with rights to set conditions affecting existing and future investments on their own terms. The Charter implicitly recognized the right of expropriation of foreign investment by host countries with due compensation and entitled them to impose specific requirements on any foreign investment. Host countries could also take 'any appropriate safeguards' to prevent foreign direct investment from interfering in their domestic policy and could decide whether to approve or to deny access to future investment. While net capital flows to developing countries were mostly private, confined to raw materials and at levels far from those reached decades later in the context of globalization, those provisions anticipated in many ways the principle of 'full permanent sovereignty of every State over its natural resources and all economic activities' embodied some 25 years later in the Declaration on the Establishment of a New International Economic Order adopted by the Sixth Special Session of the UN General Assembly in 1974.

Finally, new ground was broken with respect to the special difficulties that affected the production and trade in primary commodities such as mining and agricultural products. Both developing and industrialized countries agreed to establish procedures for temporary intergovernmental commodity agreements based on a regulation of price and production (Chapter 6). Buffer stocks were excluded, though, since the US delegation continuously opposed them despite the strong case made in their support within the Department of Agriculture. The aim was to bring price and revenue stability for primary producers and consumers. At the time, this agreement was path-breaking. The collapse of primary products prices had severely affected all countries in the interwar period, and the Charter attempted to provide a practical alternative that would permit and encourage marketing boards and other market-limiting institutions. In addition, special provisions were designed to guarantee effective support to the agricultural sector through subsidies and quantitative restrictions (Articles 20, 22, 27).

THE SIGNIFICANCE OF THE HAVANA CHARTER

It is hard to imagine within the present context that one of the most important chapters in the management of international trade relations put on an equal footing the freeing of trade with restrictions required for full employment and economic planning. Yet these apparently contradictory provisions were the key elements of the negotiating process that led to the Havana Charter. Beyond Anglo-American dissensions on their respective ability to control the international economic order at the end of the hostilities, post-war planners in London, Washington, Paris, New Delhi and Canberra all shared a conception of a trading order which should strike a balance between free-trade objectives and substantial state interventions in socio-economic policy and several sectoral aspects of international trade. This conception marks a profound shift as compared to pre-World War II arrangements that only targeted the freeing of goods and capital movement within a Gold Standard environment: an ideal of classical liberalism which meant more often than not unemployment and downward pressure on wages. The ITO mandate was totally different.

In the same way as classical mercantilism fostered the development of the modern state by reinforcing its selective and differentiated role in providing incentives for production, finance and trade, the Havana Charter supported a new form of state legitimacy relying

on key interventions in various aspects of the economic sphere. At stake was the external impact of these measures when, at the same time, states committed themselves to restoring a liberal economy at the international level. This can be captured by the apparently contradictory concept of transnational mercantilism. If states hold themselves accountable to one another in such circumstances, it is because the comprehensive understanding of the proper balance between market rules and state intervention points to the very heart of their legitimacy.

To see mercantilism as transnational is not as absurd as it might initially seem. Mercantilism was not simply state-centred, inward-looking or power-seeking (Reinert 2008; Perrotta 1991; Hont 2005). The transnational dimension entails the idea of a dynamics that goes both through and beyond the territoriality of state practice. The question, then, is how the fine-tuning of state practices is put to the test by the forces involved in a world-scale drive of capitalism. Recent and prominent scholarship on economic development in the post-Washington Consensus era echoes such concerns by pleading for an end to grand and misleading generalizations regarding the benefits of market or state planning, and a focus instead on micro impacts of development policies through detailed analysis and field research (Banerjee and Duflo 2011). While the burden of proof remains closer to market rules than state intervention in this perspective, the idea that economic policies can be valued on a pragmatic political basis instead of opposite rigid principles seems to have gained credit for providing space to reformist ideas in economic development thinking, let alone for more radical alternative routes in development policies.

Coming back to the *World Trade Report 2012* sketching some of the main challenges in adapting the WTO to a world 'beyond tariffs', it is also worth noting that the WTO analysis has now moved some distance from the market fundamentalism that marked its creation. For the WTO, non-tariff measures do not necessarily serve protectionist purposes and can just as well fulfil legitimate public-policy goals, in particular in the domain of services where regulation and standards are crucial for quality and security purposes. Without explicitly making the comparison with the Havana Charter, the report concludes, however, on a similar note when it highlights that future challenges include 'finding the right mix between international commitments and domestic flexibility in setting . . . [non-tariff measures, as well as] to bolster regulatory capacity in developing countries' (World Trade Organization 2012, 217).

On a more theoretical basis, the Havana Charter is an outstanding case to demonstrate how the object of trade policy can be defined as the latent, possible or effective contestability underpinning domestic legitimacy and international recognition of state practices considered for their impact on the trading system. Instead of viewing the trading system as an outcome of trade-offs between demands for free-trade and protectionist policies, such an approach leads to considering that these various practices can shape at great variance the spatial structures of the trading system. They can, for instance, provide room for heterogeneity and weaker actors, in contrast to the powerful homogenous propensity of market fundamentalism. Different formulae may accordingly apply to the variety of products affected. We have seen, for instance, that raw materials were treated completely differently from manufactured goods or farm products.

CONCLUSIONS

In a context of increasing doubts regarding the far-reaching consequences of the current global crisis of neoliberal globalization, the key question addressed by the negotiators of the Havana Charter remains as genuine as ever: how could a compatible relation between the transnationalization of capitalism and the economic and social role of the political authority be defined on a comprehensive scope? Seventy years after the signing of the Havana Charter, this agreement still offers some lessons for constructing credible alternatives to conventional thinking on economic development. Conventional wisdom takes it that, as globalization proceeds, the range of government practices considered to have an impact on trade has broadened; the implication being that economic policies should converge on a global market rule. This study makes it clear that the comprehensive scope of the challenge of deep integration is in fact not so new. Seventy years ago, the issues addressed by the Havana Charter already focused on non-tariff measures, such as quantitative restrictions, full employment provisions, agricultural support, subsidies, investment rights and other regulatory issues. Yet, broadening the scope of trade policy issues did not mean applying market mechanisms to more and more aspects of social life. The provisions of the Havana Charter attempted to make trade the servant rather than the master of states whose economic and social functions became critical to their legitimacy.

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16. The UNCTAD system of political economy*

Ricardo Bielschowsky and Antonio Carlos Macedo e Silva

INTRODUCTION

In the two decades that followed World War II, an increasing number of countries came to realize that, in spite of their many differences, they had much in common. They were scattered among three continents and they could be found on both sides of the then crucial divide between socialist and capitalist economies. But they all featured poorly diversified economies in which most jobs were low-productivity and low-paid ones, and whose exports were mainly primary and labour-intensive goods. They shared a condition that a few years before had not even been given a name: they were underdeveloped. And they were unhappy with the few and fragmented initiatives that the United Nations and the Bretton Woods institutions had taken to address their concerns (Toye and Toye 2004).

Most of them had been colonies and many had just become independent, reinforcing the majority of poorer countries in the Economic and Social Council and in the General Assembly of the United Nations. This majority decided to convene, in 1964, the first United Nations Conference on Trade and Development (UNCTAD). During the event, underdeveloped (or developing, in more recent parlance) countries, organized as the Group of 77 (G77), supported the creation of a permanent institution whose mandate would be 'to formulate principles and policies on international trade and related problems of economic development' (UNCTAD 1964, 15). Moreover, they kept Raúl Prebisch, who had written the report for the conference and led it, as the Secretary General of the institution, which was from its inception one of the most controversial branches of the UN system. Prebisch had been, since 1950, the executive secretary of the United Nations Economic Commission for Latin America (ECLA, later ECLAC, C for Caribbean countries), a no less controversial UN chapter, where he had developed a structuralist interpretation of Latin American development which would be generalized by UNCTAD and inspire its global proposals.

This chapter concentrates on the intellectual contribution of UNCTAD.¹ It first enounces the theoretical approach and the main stylized facts that have underpinned this contribution, which has mostly taken the form of applied analysis and normative propositions. It then proposes a chronology of UNCTAD's intellectual trajectory in light of the significant changes in the global economy and political economy since 1964. The

* A draft for the first part of this text was written in 2002 after a large number of interviews with UNCTAD's directors and staff. The authors are grateful to all of them, as well as to Rubens Ricupero, General Director by then, for his kind support of the research. The final version benefited from dialogue with Charles Gore and from comments by Alfredo Saad.

¹ The literature on UNCTAD includes the following texts, among others: Cordovez (1967), Gosovic (1972), Rothstein (1979), Zammit-Cutajar's (1985) edition of selected papers, Weiss (1986), Emerij et al. (2001, Ch. 2), Maizels (1992); and in the most recent period, Bello (2000), Kasahara (2002), Köhler (2001), Toye and Toye (2004), UNCTAD (2004) and Smith and Taylor (2007).

next section focuses on the more recent period, when the institution had to cope with neoliberalism and globalization. A brief conclusion follows.

THE UNCTAD SYSTEM OF POLITICAL ECONOMY

Schumpeter, in one of the introductory chapters to his monumental *History of Economic Analysis* (1954, 38), distinguishes his subject matter (the 'Economic Analysis') from a different (but related) one, the 'Systems of Political Economy'. In his definition, a system of political economy is described as 'an exposition of a comprehensive set of economic policies that its author advocates on the strength of certain unifying (normative) principles, such as the principles of economic liberalism, of socialism, and so on'.

UNCTAD's contribution mainly belongs to the latter category.² However, if one looks for a motto that captures the main thrust of its system, no simple message will be found. In UNCTAD's texts, there are neither odes to the markets nor a naïve belief in an infallible state. There is, instead, a pragmatic (yet vigorous) discourse which summons nations to move 'towards a new trade and development policy' and 'a global development strategy' (as in the titles of Prebisch's reports to the 1964 and 1968 Conferences; see UNCTAD 1964, 1968; Prebisch 2004 [1964]).

Sticking to Schumpeter's useful dichotomy, it should be said that this discourse is based on a set of analytical arguments (and stylized facts). On the one hand, UNCTAD's work goes much beyond abstract growth theory, when it states, as in ECLAC's analysis, that the paths actually trodden by any economy are constrained by a set of historically determined (internal and external) structures (Bielschowsky 2000); development is precisely the transformation of internal economic structures towards a configuration consistent with sustainable growth in the income per capita of poorer countries.

On the other hand, this 'structuralist macroeconomics' (see e.g. Taylor 2004; Ocampo et al. 2009) is firmly grounded in Keynesian and Kaleckian macroeconomics. That is to say, it understands growth as a process which is normally demand-led; this implies that, most of the time, aggregate demand is insufficient to fully employ labour and capital, in contrast with neoclassical growth theories, which assume that markets ensure that there are no idle productive resources.

A set of stylized facts informs UNCTAD's vision about the nature of the transformations (and about the policies that must be adopted to make them possible) related to development. These facts have been identified and explored by a lineage of economists that departs from both the mercantilists and Adam Smith (and Friedrich List; see Reinert 1994), encompasses such names as Allyn Young (1928), Prebisch (United Nations 1949), Hans Singer (1950) and Nicholas Kaldor (1978 [1966], 1978 [1970], 1981) and, more recently, has gained the support of mainstream economists such as Dani Rodrik (2006a, 2006b).

The main finding is that development is 'activity-specific' (Reinert 1994). What a country produces (and exports) matters: economic activities differ widely in what concerns

² Bielschowsky (2000) used this differentiation in his book celebrating ECLAC's fiftieth anniversary. Macedo e Silva (1999) suggested that this approach to ECLAC's intellectual history might also be used to deal with UNCTAD's intellectual history.

the importance of their internal and external returns, and thereby in their implications for productivity growth and for the stringency of balance of payment constraints to economic growth. A related stylized fact is that in poorly diversified (that is, underdeveloped or peripheral) economies which specialize in producing and exporting simpler (mostly primary) goods, growth tends to be slow and fragile, since global markets for these goods feature huge fluctuations both in quantities and in prices. Besides, there is a tendency for such economies to suffer from a 'trade gap' (Prebisch 2004), for the income elasticity of their imports (of more technology-intensive or 'sophisticated' goods) is much higher than the income elasticity of their natural-resource and/or labour-intensive exports. The possibility of a secular decline of terms of trade (the famous Singer–Prebisch thesis, and arguably a more debatable stylized fact) exacerbates a tendency towards balance-of-payments crises and/or the adoption of restrictive macroeconomic policies, hindering growth in both cases (Chenery and Bruno 1962; Kaldor 1978 [1970]; Thirlwall 2011).

From these theoretical and positive statements a normative proposition immediately follows: convergence in welfare standards between countries requires the economic diversification (which involves some degree of industrialization) of the economies which were not at the centre of the development process that took place in eighteenth and nineteenth centuries. Nevertheless, unlike what orthodoxy used to claim, as a reaction to ECLAC and UNCTAD heterodoxy, it does not follow a defence of autarchic strategies, but rather a defence of international integration supported by global developmentalism. Industrialization in developing countries should lead to a change in the composition of trade, and not at all to less trade (UNCTAD 1964; Rodríguez 1981). In fact, UNCTAD shares with the Bretton Woods institutions the idea that multilateral economic integration can benefit all countries. However, while for more orthodox economists the free play of markets can be trusted to produce this result, for UNCTAD, in a demand-led and polarized world, for countries to fully reap the benefits of the international division of labour there must be a set of global and regional institutions which allows for the implementation of adequate demand management and development policies.

UNCTAD's normative principles in favour of 'development-led globalization' (UNCTAD 2011a) can be stated as follows:

- Economic multilateral integration and international cooperation are crucial. In particular, systemically important countries should coordinate their economic policies so as to guarantee a steady growth of the global economy.
- The improvement of international regulations and policies on commodities, trade, finance and related issues is key to a more equitable global trade and development. Underdeveloped countries must be granted preferential treatment in some of these rules, since the 'global playing field' is far from level in economic and political terms.
- A productive dialogue between nations cannot be expected to happen if the main forums are the contribution-based Bretton Woods institutions, where rich countries have the majority voice. Consequently, a joint effort of developing countries is needed, so as to give them more leverage in the international decision-making process and to make sure that a substantive part of this dialogue takes place in UN institutions.
- An appropriate international order is one which stabilizes the prices of commodities

and acknowledges the interdependence between development, trade and finance. It is therefore an order that provides assistance and finance to support development and industrialization in developing countries and that allows them to face up to external vulnerability due to cyclical downswings, terms-of-trade shocks and long-run terms-of-trade deterioration.

- It is also an order in which developed countries grant market access to developing countries' exports of primary and, in particular, of industrial products, in harmony with the diversification of the latter countries.
- International coordination should be compatible with the preservation of countries' 'policy space' (TDR 2002) to decide the measures to enable and pace the rhythm of structural change. This applies first and foremost to developing countries, which must be able to experiment with country-specific strategic development programmes aimed at structural changes in the sphere of production, rapid increases in productivity, technological upgrading and international competitiveness.
- Developing countries tend to have quite small economies; trade integration among them, based on preferential agreements and planning at the regional level, creates bigger markets, giving their firms a chance to accumulate capabilities and become able to compete with developed countries' ones. Monetary and financial South–South integration can facilitate trade integration, while contributing as well to increase currency, payments and financial stability (UNCTAD 2011b).
- Along with trade, external finance and foreign direct investment are not ends in themselves. A balanced international order must provide stability in financial flows and appropriate terms and costs, but this only works if finance is carefully used within country-specific development strategies, which must include export diversification and expansion: the critical elements for debt servicing and avoidance of debt crises. Likewise, foreign direct investment (FDI) is potentially an important source of growth – and of exports – but its best use by developing countries depends on good development policies and strategies.

Most of this was already set out in the relevant UNCTAD documents and resolutions of the inaugural 1964 Conference, as well as the 1968 Conference, under the leadership of Prebisch, Sidney Dell and Wladek Malinowski. There have, of course, been some changes in the form and political emphasis of restatements over the past 40 years, corresponding to flexible adaptations to political pressures coming from adversaries. Also, there have been some shifts in the weight and composition of the issues and policy proposals raised, corresponding to flexible adaptation to changes in the world political, economic and institutional environment.

It would be wrong not to recognize moments in the intellectual production of UNCTAD when the coherence of its ideas and arguments has been challenged, as well as moments when some concessions have been made to the principles, challenging consistency over time. The very fact of being an intergovernmental body has a lot to do with this, as resistance to tough opposition coming from the North is bound to give way to defensive approaches. Notwithstanding this, the original principles have been kept as the backbone of the institutional role and philosophy of UNCTAD since its early days until today. Despite eventual accommodations to pressures, for 50 years they have served as a

comprehensive conceptual umbrella for UNCTAD's system of political economy, in the analysis, arguments, actions, negotiations and deliberations of the institution.

THE THREE PHASES OF INTELLECTUAL PRODUCTION

One can divide UNCTAD's intellectual history into three major phases, reflecting the institution's political history and the related evolution in the world's economic, political and ideological history. In the first phase, from 1964 to the late 1970s, UNCTAD's intellectual production echoed the South's 'development initiative' in the international multilateral scenario, corresponding to a mature period of the post-war developmentalist and Keynesian era. The second phase, in the 1980s, reflects a transitional period of crisis in UNCTAD's centre-periphery dialogue. The third (from 1990 onwards) reflects UNCTAD's critical stand towards neoliberalism and globalization. For the sake of brevity, in what follows we highlight just some central aspects of this chronology.

The first phase corresponds to the rise and climax of UNCTAD's negotiating role. In spite of recurrent reluctance to acknowledge a negotiating forum where they could not have a majority voice, rich countries were pushed into the new UN body by a number of historical factors: the vacuum left by the non-implementation of the Havana Charter and International Trade Organization (ITO); the UN's developmentalist wave, symbolized by the first and second 'development decades'; rapid decolonization; the growing political unity and pressure of non-aligned countries and the G77; and, perhaps above all, East-West confrontations and their impact on global geopolitics.

During the first ten years or so, the basic policy agenda presented in 1964 was expanded and refined, and some progress in policy implementation was achieved. The core of the agenda involved negotiations on commodity agreements, on trade policies, on criteria for monetary and financial policies, and on shipping. Technology was included in the central concerns of UNCTAD in the first half of the 1970s, with UNCTAD questioning the operation of intellectual property regimes and the asymmetries in technology trade.

The 'climax' corresponds to the phase of the 'commodity challenge', following the first oil shock in 1973, and the global development strategy put forward by the Group of 77 in the 1974 UN 'New International Economic Order' (Spero and Hart 1997; Toye and Toye 2004). This was a period of hectic and confident production of policy proposals by UNCTAD (see UNCTAD 1985, 2004). Unlike the 1968 Conference in New Delhi and the 1972 Conference in Santiago, in which a rather confrontational atmosphere between the North and the South prevailed, the 1976 Nairobi Conference produced greater dialogue and the decision to support an Integrated Programme for Commodities and a Common Fund for price stabilization purposes. This period of climax was to last until the end of the 1970s.

Paradoxically, the climax coincided with a first decline of both Keynesianism and developmentalism. Although a more definitive defeat would come only when Reaganomics and Thatcherism became a leading reference for policies during the 1980s, growing attacks by orthodoxy in academic and policy-formulation circles were already present in the second half of the 1970s as a reaction to stagflation in the developed world and inflation and current-account deficits in developing economies.

During this first phase, from 1964 to the late 1970s, the intellectual production of

UNCTAD was largely motivated by policy negotiations, and UNCTAD's analytical and empirical production was aimed at supporting them, as were its political statements.

The second phase comprises the 1980s, when fast terms-of-trade deterioration for developing countries completely swept away any vestige of the previous 'commodity challenge', and a quite generalized debt crisis dominated these countries' major economic concerns. The 'lost decade' saw the rise of the neoliberal era and the end of the former acceptance by rich countries of UNCTAD as a forum of negotiations with the South. During this decade, in spite of large and growing protectionism in rich countries, the Bretton Woods institutions were gradually building up the 'Washington Consensus'. The meaning of this to UNCTAD was that its dearest principles were under attack: developing economies should refrain from trying to interfere in the international trade and financial order from outside the Bretton Woods institutions and should abandon the 'state-led' (see Cárdenas et al. 2000; TDR 2004, 2006) development strategies of the past. Instead, they should promote 'structural adjustment' reforms according to the 'one-size-fits-all' framework.³

Negotiations between the North and the South in UNCTAD were increasingly obstructed, when not virtually ignored, by rich countries all through the 1980s (Toye and Toye 2004, Ch. 11). When the issues on the South's negotiating agenda were tabled at UNCTAD Conferences and in the Trade and Development Board, the overall result was in most cases stalemate. Furthermore, economic fragility in Latin American and African countries was undermining their capacity to negotiate in international forums.

In spite of all this, no change occurred in the commitment of the G77 in UNCTAD to pursue its attempts to change the international order as preached since UNCTAD's foundation. In many instances, an even more radical tone was used. The former cycle of intellectual production aimed at policy proposals and negotiation within UNCTAD therefore survived throughout the 1980s. It did so, however, with gradually declining intensity, as the prospects for achieving practical results in the international negotiation setting were weak, and as developing countries were aware that their way out of the debt crisis had little to do with what UNCTAD could effectively achieve in the negotiating process, at least in the short and medium term.

At the same time, the first steps were taken towards the gradual design of a conceptual framework for dealing with the negotiating process in favour of developing countries within the General Agreement on Tariffs and Trade (GATT). UNCTAD started moving in this direction in the late 1980s, during the Uruguay Round, but maturity in respect of this conceptual move was reached only at a much later stage, in the second half of the 1990s, after the creation of the World Trade Organization (WTO).

Indeed, the relevant intellectual move in UNCTAD in the 1980s came elsewhere, namely in the growing opposition to the mainstream analysis of the new orthodoxy. The annual *Trade and Development Report* (TDR) provided increasingly refined critical analysis of the workings of international trade and finance under the auspices of the Washington institutions.⁴ It assessed the adverse effects of protectionism and deflationary policies

³ According to Gore (2004), in the 1970s, the 'structural adjustment' was understood as a process that developed countries should go through so as to reduce the economic and social costs implied by the absorption of an increasing volume of ever more sophisticated imports from developing countries.

⁴ The TDR – 'the only multilateral development report to provide serious economic challenges to

in developed economies – and the lack of macro-coordination among them – and put forward a number of proposals for debt-adjustment-cum-growth schemes in developing countries and for massive debt relief, especially for least-developed countries (LDCs).

The 1980s were thus a transition period in UNCTAD, in which two large cycles of intellectual production overlapped, with on the one hand the decline of the production cycle directed at policy negotiations within UNCTAD's machinery (seen by the organization since the 1960s as an alternative to the GATT) and, on the other, the rise of the production cycle directed against anti-Keynesian and anti-developmental orthodoxy, along with the beginnings of conceptual support to developing countries in the Uruguay Round and in the future WTO negotiations.

The third phase of intellectual production encompasses the climax of neoliberalism as of the early 1990s and the weakening of the Washington Consensus as of the late 1990s. The fall of the Soviet Union, the decline of cohesion within the G77, the consolidated dominance of the Washington stand in the international institutional arena and the creation of the WTO in 1994 set the landscape for the most exacting years in the history of UNCTAD. At the 1992 Cartagena Conference, under severe pressure from rich countries and with insufficient political support from the South, UNCTAD was finally obliged to abandon its 'independent' negotiating role, which had already been virtually paralyzed in the preceding years (Dubey and Boutros-Ghali 2006). Developed countries' onslaught reached its paroxysm in the following years, when the extinction of UNCTAD was proposed, on the pretext that the creation of WTO rendered it irrelevant (Gibbs and Ognitvsev 2004, 10).

In spite of this harsh environment, UNCTAD managed to survive and sustain some active roles, for instance in the reassembling of developing countries in the WTO. At the beginning of the Uruguay Round, developing countries saw it as an opportunity for attacking the increasing discrimination against them experienced in the 1980s in respect of old issues such as the multifibre agreements, agriculture protectionism, voluntary export restraints (VERs), anti-dumping measures, and so on. At some point it became clear that, for developed countries, the WTO should provide an adaptation of the multilateral system to growing productive and capital globalization in a broad context, that is, including interests that go well beyond pure trade issues and implying a significant reduction of developing countries' policy space. Once developing countries realized the real scope of the institutional change, their reaction was mostly one of damage control. Notwithstanding the active role some developing countries had during the Uruguay Round, it can be said that until the mid-1990s they developed no alternative strategy to cope with multilateral negotiations. The 'positive agenda' (Jha and Vossenaar 1999; UNCTAD 2000), which was prepared under the leadership of UNCTAD in the years prior to Seattle, was the first initiative of the South in the new globalization context.

Survival has included UNCTAD's ability to defend the scope of its research activity

heartland free-market views' (Wade 2001, 130) – has been published since 1981. For an overview, see the volume that celebrates its 30 years (UNCTAD 2012). Yet, according to Smith and Taylor (2007, 53), 'although there has been much praise for the critical and independent nature of analysis in publications like the *Trade and Development Report*, this level of analysis is not consistent throughout the organization's work'. For instance, in contrast to TDR heterodoxy, UNCTAD's yearly *World Investment Report* presents quite an ideological analysis of transnational corporation (TNC) activities on neoliberal grounds (TNCs as 'engines of growth' demanding free markets).

and the intellectual independence of its staff. In fact, developed countries repeatedly tried to restrain UNCTAD's mandate, which according to them should concentrate on technical trade issues, leaving to the Bretton Woods institutions the examination of thorny (but crucial, and inextricable from trade and development) themes such as the macroeconomic policy of countries (especially of the developed ones), global imbalances and the reform of the international financial architecture.⁵ Fortunately, UNCTAD's researchers were not prevented from analysing and publicly discussing the several events that, starting with the 1994 Mexican crisis, came to disseminate, among a wider audience, their doubts about the virtues of a market-led – or, more specifically, a finance-led (UNCTAD 2011a) – globalization process.

COPING WITH GLOBALIZATION

The theoretical, positive and normative statements presented above provide the key to understanding UNCTAD's stance towards neoliberalism and globalization. The crux of the matter, of course, is not globalization itself, for international integration was never anathema for the institution. The cleavage is elsewhere. From a more abstract standpoint, it originates in the old dissent between those for whom markets and states, both fallible institutions, complement each other (with the help of many other social and political institutions), and those who assume that markets are the quintessential mechanism of coordination among agents. From the applied economics standpoint, it defines the chasm – which only grew bigger, in the period – between those who analyse the trajectories of national economies taking into account global interdependence, and those who contend that poor nations themselves are to blame for their poverty, for it is up to each nation to apply *the* blueprint of best practices that every well-schooled policy-maker should know by heart. From the normative standpoint, it feeds unending controversies with regard to the international setting and to national (macroeconomic, industrial, financial, social) policies.

The first TDR issues in the 1980s acknowledged the increasing interdependence between countries, through trade, foreign direct investment and finance. Though the Bretton Woods era had not been a boon to development, the demise of some of its central features elicited more concern than hopes. Macroeconomic policies in the developed countries no longer focused on growth. Moreover, the 'privatization of the international monetary system' (TDR 1981, 75), which brought about more instability in exchange rates and the building up of developing countries' external debt, was troubling; remarkably, a later edition anticipated the current debate on financialization, stating that 'real economic variables in the world economy have become increasingly under the influence of monetary and financial variables' (TDR 1984, 55).

The institution realized as well that in this new context the dichotomy between centre

⁵ The dossier compiled by *Third World Resurgence* (2012) shows that such pressures – which led, for instance, to the extinction of the Division on Finance by the Midrand Conference in 1996 – continued in the 2012 Doha Conference, in spite of the enduring effects of the 2007–2008 global financial crisis and in spite of the fact that UNCTAD had been one of the few voices persistently warning about the perils of financial instability.

and periphery had become more nuanced (Gore 2004). Growth among developing countries, in the preceding decades, had presented a considerable dispersion. The best performers – a small group of East Asian and Latin American countries – had been those ‘characterized by an outward-looking policy favouring export promotion’ (TDR 1981, 34). To some extent, this result vindicated the view, sustained by Prebisch at ECLAC (ECLAC 1949) and later at UNCTAD, that it was crucial to reverse the course that had led many developing countries – especially in Latin America – to ‘becoming industrialized in watertight compartments . . . to the serious detriment of productivity’ (UNCTAD 1964, 14). However, countries such as Brazil, Korea, Mexico and Taiwan had managed to substantially increase their exports of manufactured goods in spite of the meagre results of both international negotiations towards ‘differential and more favourable treatment of developing countries’ and regional South–South integration initiatives; there was clearly a puzzle to be solved.

In the following years, the 1980s debt crisis,⁶ which hit Latin American countries in a particularly damaging way, entailed a new divide among developing countries: to most observers, there was no longer any story of success beyond that of the East Asian countries. In the orthodox rendition, that story was quite a simple one: those countries had only harvested the sure and rewarding fruits of free-market outward-oriented policies, while the rest of the developing world had stubbornly relied on unsound interventionist inward-oriented import-substitution practices.

This interpretation, summarized (though arguably in a less blunt way) by the famous 1993 *East Asian Miracle* World Bank study, was confronted by UNCTAD on several occasions. To UNCTAD, the approach was flawed in trying to identify a sole Asian model. Besides, this model wrongly conflated outward orientation with trade liberalization and internal laissez-faire policies (Gore 2004). It therefore seriously underestimated the extent, the depth and the efficiency⁷ of state intervention in Korea and Taiwan (and, for that matter, in Japan). In UNCTAD’s interpretation, inward and outward orientation ‘should be looked at as complementary, not incompatible’, for ‘most successful exporters have managed to combine elements of both export promotion and protection’ (TDR 1992, 17). Moreover, instead of ‘getting the prices right’, policy instruments in these countries had deliberately distorted incentives:

By lifting profitability through rent generation and other means, government intervention served simultaneously to enhance the incentive of firms to invest and their capacity to finance new investment; investment was channelled into activities that maximized overall growth; this in turn increased profits, by allowing capacity to be more fully utilized and by quickening the pace of productivity improvement, which increased the overall rate of investment. A ‘virtuous circle’ was thus set in motion, with strong propensities to save, invest and innovate feeding and being fed by profits growth. (TDR 1994, vii)

⁶ The debt crisis once more vindicated UNCTAD’s point about interdependence, for the debt was fuelled by the privatization of international finance and the crisis itself was prompted by the increase in US interest rates in 1979.

⁷ Most mainstream studies oscillated between the denial of state intervention in these countries and an acknowledgement of its existence, adding in this case that, happily enough, the intervention had not been harmful, but basically innocuous (see Wade 1996).

This 'investment–profit nexus' (see also Akyuz and Gore 1996) was connected to a second nexus, between investment and exports, feeding a virtuous circle 'of higher demand, greater investment and increased productivity growth' (TDR 1996, 108).⁸

Many developing countries had been trying to set in motion similar mechanisms, though certainly with less efficiency (and less US support or complacency, when located in less strategic regions). The debt crisis put an abrupt end to these experiments. UNCTAD was quick to defend the idea that the international architecture lacked appropriate mechanisms to cope with sovereign debt along the lines of the famous Chapter XI of US Bankruptcy Law, which tries to facilitate the renegotiation of firms' debts, keeping them afloat and avoiding unemployment (TDR 1986). Instead of a similar arrangement, which might make adjustment compatible with development, indebted countries were urged to apply contractionary policies and to implement both the original Washington Consensus reforms and those in the 'augmented' version (which included the use of the exchange rate as a nominal anchor and the liberalization of cross-border financial flows; see Priewe and Herr 2005).

These reforms, as acknowledged by the 2003 TDR, did contribute to controlling inflation. However, UNCTAD made it clear that they did not deliver what they had promised. Privatization, trade liberalization, financial deregulation and liberalization of inward foreign direct investment (which often came together with other measures dismantling capital controls) did not bring stabilization of the central macroeconomic prices (interest and exchange rates), and could ensure neither the robustness of external accounts nor economic growth. More to the point, they proved unable to ensure the recovery of investment growth rates, which is a *sine qua non* condition for structural change and development. Worse yet, the structural change that did happen mostly went in a wrong or perverse direction: while in some countries a 'premature deindustrialization' (UNCTAD 2011a, 36) was accompanied by a decrease in the share of manufactured exports, in many others the growth of such a share was not paired with a commensurate growth in value added (TDR 2003 and Kozul-Wright, 2007), especially when they only corresponded to the less sophisticated links in international production networks (TDR 2002).

In the following years, UNCTAD continued to question the appropriateness of the policy and institutional changes in developing countries as well as in the international setting. While Bretton Woods institutions were still celebrating the move towards the new paradigm, the institution was flagging early warnings about the financial fragility of countries such as Mexico and Argentina. Hence when new crises overtook these (and some other) countries, UNCTAD researchers were not surprised; while orthodox observers were, who then concluded that the problem was the supposedly half-hearted implementation of the reforms. To UNCTAD, the crises were to be explained by the very adoption of the new paradigm. This divide showed itself in the interpretation of many other events. When, for instance, a (more unexpected) crisis broke out in East Asian

⁸ The export–investment link, clearly an empirically robust one, draws upon Kaldor's contribution (see Kaldor 1981). The investment–profit link (which is also rooted in Kaldor, as in Kalecki) is used to justify a more contentious proposition, according to which some governments restrained conspicuous consumption, ensuring that a bigger share of profits would then be invested. In a Kaleckian framework, capitalists' consumption creates profits as well as investment expenditure. It can only divert resources that otherwise would be available to investment if either the economy fully employs its resources (which is not something that usually happens in developing countries) or if consumption goods are imported (see Serrano 2001).

countries, while the same orthodox observers suddenly found out that in their former role models there had been too much state intervention, UNCTAD researchers explained the event by the perverse conjunction of financial account liberalization in these countries and the absence of an international framework to prevent contagion (TDR 1998).

Needless to say, UNCTAD shares the Keynesian mistrust towards financial markets, deemed to be – if unfettered – a source of instability rather than a mechanism for channelling resources to productive ends. Such a mistrust, which under Bretton Woods had supported both the regulation of financial activities and the use of capital controls, was replaced under neoliberalism by unmitigated enthusiasm. Even though the Asian crisis did lead the International Monetary Fund (IMF) to retreat from changing its mandate so as to include the promotion of financial account liberalization, it took the 2007–2008 financial crisis in developed countries to partially restore, among mainstream economists and policy-makers, the respectability (but not the hegemony) of these Keynesian ideas. As is well known, even the countercyclical use of fiscal policy was rehabilitated, if only for a brief period.

UNCTAD has also defended other (less fashionable) Keynesian ideas about the global order. So it is not surprising that some elements of the ‘global New Deal’ defended by UNCTAD (2011a, 68) resemble Keynes’s original proposals for the Bretton Woods agreement. It is in the interest of all countries that exchange and interest rates should be protected from the vagaries of speculative short-term cross-border financial flows. This, of course, underlies the defence of capital controls but also calls for other measures, such as harmonization and multilateral surveillance of macroeconomic policies,⁹ so as to ensure at least the stabilization of exchange rates between main reserve currencies (TDR 2001). A corollary of capital controls is that the continuation of international integration would have to rely on multilateral finance. This might be achieved, for instance, by the allocation of IMF’s special drawing rights (SDRs) among countries. The fact that UNCTAD shares – and goes beyond – Keynes’s concerns about the asymmetries among countries should not be surprising. According to Keynes, deficit and surplus countries should share the burden of adjustment. Besides this, according to UNCTAD, the asymmetries between developed and developing countries should be addressed by a ‘development link’ in the form of ‘incentives for the use of reserves to finance expenditures related to development and climate change’ (UNCTAD 2011a, 73).¹⁰

CONCLUSION

Normative propositions are always bound to raise controversy, given the complexity of most issues and the existence of different groups of interest, both of which give rise to the coexistence of multiple visions and methodological approaches. When it comes to

⁹ These should include income policies (TDR 2007) for stabilizing internal prices.

¹⁰ UNCTAD argues that climate-change mitigation policies must be rendered compatible with development, for instance by integrating such policies with ‘more proactive national industrialization strategies’ that facilitate the ‘development and diffusion of climate-friendly technology, equipment and consumer products with wider national R&D [research and development], innovation and investment promotion policies’ (TDR 2011, 156).

economic (or political-economy) questions, the dissent is particularly strong, while the debate is peculiarly truncated. Heterodox economists, being a minority, cannot afford to ignore the results obtained and the theses defended by their orthodox peers. They read, analyse, question and invite them to the debate. These invitations are, as a rule, ignored, for most orthodox economists hardly acknowledge the existence of heterodox alternatives.

This chapter has concentrated on the heterodox foundations of and normative prescriptions defended by UNCTAD. During its whole history, the institution has shared the heterodox plight and fate: it has taken into account, analysed, benefitted from (when possible) and questioned (when necessary) the evolution of the orthodox thought and proposals. This is the reason why, for open-minded individuals, UNCTAD's texts – most especially the TDRs – are an invaluable synthesis of the spectrum of approaches to contemporary economic problems. Multilateral institutions, governments and economists with an orthodox bias ignore UNCTAD's contribution at their peril.

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PART II

APPROACHES TO UNDERSTANDING DEVELOPMENT

17. Marxist theory and the ‘underdeveloped economies’

Prabhat Patnaik

Marxist theory sees ‘underdevelopment’ as the outcome of the operation of capitalism at the global level. It believes, therefore, that the problem in its generality cannot be overcome through a mere replication of capitalist development domestically within the ‘underdeveloped countries’. Such replication can only produce increased differentiation within these societies or increased differentiation between one underdeveloped country and another. When the latter happens, the apparent success of some countries in overcoming underdevelopment is then claimed as a success of capitalism. But what is missed is that, taking the underdeveloped world as a whole, such success of some countries invariably occurs alongside the immiserization in others.

It is not possible here to cover the Marxist theory of underdevelopment in its entirety. This chapter therefore seeks at best to give a whiff of Marxist theory, by confining itself to only three issues and how Marxist theory perceives these issues. There is of course no Marxist theory unanimously accepted by all who claim to be Marxists; what follows is a particular reading that others may disagree with.

The three issues covered here are: the genesis of underdevelopment; the post-decolonization trajectories of development in the underdeveloped economies; and the impact of neoliberalism on these economies. Because the concern of Marxist theory, stated in the ‘Eleventh Thesis on Feurbach’, is with ‘changing the world’, it has not discussed these issues in a scholastic, speculative manner; its perception of these issues has emerged out of the need for working out the direction of revolutionary praxis in these countries. Hence the development of Marxist theory on these issues has owed as much, if not more, to Marxist revolutionaries as to Marxist academics.

THE GENESIS OF UNDERDEVELOPMENT

The mainstream view, expressed for instance in the work of Simon Kuznets (1966), that sees underdevelopment as the absence of development has been systematically rejected by Marxists, starting from Marx himself. This view, to illustrate by an analogy, sees development as a race among countries in which some went ahead while others lagged behind or never even got started. It then concerns itself with discovering the reasons for this discrepancy, reasons which it believes have necessarily got to do with factors internal to these countries, so that obstacles to the development of the laggards could be removed. The problem of overcoming underdevelopment consists in this view in overcoming these internal fetters.

Marxist theory fundamentally rejects this view. It sees underdevelopment as a specific form of development forced on these societies by their being drawn into interaction

with the capitalist mode of production that had developed in Europe. Capitalism, as the *Communist Manifesto* had noted, is not a closed, self-contained system (even though the whole of mainstream economic theory invariably analyses it as such). It is global in its reach and operations from the very beginning; indeed the genesis of industrial capitalism itself lies in a particular global trade network into which the European countries had already entered (Deane 1979). Capitalism, coming into being within this network, develops it further by force: opening up pre-capitalist economies to its incursion; imposing upon them through force newer trade patterns in keeping with its own changing needs; and thereby transforming their economic structures. (The Opium War, which aimed at opening the Chinese market to the import of opium so that this substance, forcibly produced in India, could be sold to China for the consumption of its population, in exchange for Chinese goods demanded in Europe, is a classic example of such use of force, even outside of colonial wars.)

What the colonial and semi-colonial economies became through the incursion of capitalism therefore is not what they were. They underwent a specific form of development that produced underdevelopment. Andre Gunder Frank (1966) highlighted this process by talking of 'the development of underdevelopment'. But the process itself had already been discussed by Marx, especially in his writings on India for the *New York Daily Tribune*,¹ where he had mentioned the 'destructive' role of British colonialism on the pre-existing Indian society and had hoped for a 'regenerative role', though convinced that such regeneration could truly occur only if either there was a proletarian revolution in England or if the 'Hindoos' themselves threw off the colonial yoke.

Why capitalism emerged in Europe rather than in countries like India or China is a matter that has been much discussed among Marxist theorists. One view, held *inter alia* by Mao Zedong himself, argues that capitalism could have developed in due course even in countries like China, but that such a prospect was thwarted by the penetration of European capitalism into these countries. Paul Baran (1957), defending the plausibility of this view, drew attention to the fact that the only Asian economy to develop a capitalism of its own was Japan, which had escaped becoming a colony or a semi-colony. Others, like Irfan Habib (1995), however, are less sanguine, at least about India being on the threshold of a capitalist development of its own. The Indian economy in the pre-colonial period, he argues, had witnessed the commoditization of the economic surplus that was paid to the overlord in the form of cash, rather than a commoditization of production per se which typically precedes capitalism. But no matter whether capitalism was imminent in the non-European societies prior to the encroachment of European capitalism, such encroachment certainly made these societies appendages of Europe, negating all prospects of developing any capitalism of their own, producing structural changes that one typically associates with underdevelopment and engendering within them modern mass poverty.

Features of European Encroachment

The two most important features of this encroachment were, first, the direct plunder of the resources of these economies by the European powers, a plunder that, many Marxists

¹ These writings have been brought together in Hussain (2006).

including Paul Baran hold, was also responsible for ushering in the Industrial Revolution. The obvious form of this plunder was the taking away of gold from the Spanish colonies, to which even the avowed anti-Marxist John Maynard Keynes (1971) had attributed the origin of European capitalism. But the less obvious, though far more significant form of it was the systematic 'drain of surplus' (a term used by the Indian nationalist writers, whose substance was accepted by Marx himself) that occurred from the colonies² and semi-colonies throughout the period of colonialism. It was camouflaged in the balance-of-payments data through various offsetting 'import items', so that it appeared as a payment for the import of certain services, rather than an unrequited transfer to the imperial metropolis. But the colonies' demand for these services themselves (such as the service of being provided with administration) was imposed by the colonial masters upon the colonies, as was the actual magnitude of payment for them, so that the payment really amounted to a forcible transfer of surplus (U. Patnaik 2006).

The second feature was what the Indian nationalist writers had called 'de-industrialization', which referred to the destruction of local craft production in the colonies and semi-colonies by the import of manufactured goods from the metropolis. Both the 'drain of surplus' and the substitution of local products by imports had the effect of throwing large numbers of craftsmen and other pre-capitalist producers out of work. The effects of these two phenomena, drain and de-industrialization, were additive, as the following simple example shows.

Suppose, in the pre-colonial economy, the overlord took away surplus worth 100 units of corn from the peasants and used it for maintaining 100 artisans (each paid 1 unit of corn), whose output he consumed. Now, with colonialism, suppose the overlord was left with only 30 units of corn surplus and the colonial power took away without any *quid pro quo* the remaining 70 in the form of corn (or some other commodity to whose production such corn land could now be devoted); and also suppose that the overlord in the new situation consumed imported goods instead of local craft-produced goods as earlier. Then the entire 100 artisans would be thrown out of work: 70 of them would be thrown out because the colonial plunder took the commodity form of corn (or some other good produced on corn land); and 30 would be thrown out because the overlord himself, now reduced to consuming only 30, consumed imported goods rather than locally produced ones. The entire 100 units of corn surplus would now be exported, 70 without any *quid pro quo* and 30 against the import of manufactured goods for the overlord's consumption. The 100 artisans now thrown out of work would crowd on land and constitute an unemployed or underemployed mass, which not only was itself afflicted with poverty but also ensured that the peasantry (hit by higher rents owing to overcrowding on land) and agricultural labourers (hit by lower wages for the same reason) were pushed deeper into poverty.

Many Marxist economic historians have thus traced the roots of the mass poverty we witness today in 'underdeveloped countries' to the impact of colonialism, which needless to say was not only confined to formal colonies, but also extended to semi-colonies and dependencies of various kinds. It is the capitalist penetration of the Third World that

² Whenever the term 'colonies' is used on its own in this chapter, it invariably refers to the 'colonies of conquest' like India, Malaya and the West Indies, and not to 'colonies of settlement' like the United States or Canada.

underlies the emergence there of the mass poverty we witness. Deprivation no doubt had existed there even earlier, but it had been associated with the low level of the development of productive forces and the heavy extraction of surplus by the overlords. What colonialism brought about, without changing either the level of the productive forces or the magnitude of surplus extraction from it (in fact, it raised this magnitude), was two specific additional things. One was an immense increase in the pressure of population on land, owing to the factors mentioned above. The other was a systemic change consisting of the following elements: a rigid paraphernalia of contracts associated with production for distant markets; an insistence on timely payments of government dues; and a legal framework to enforce contracts. This systemic change spawned a whole new class of lawyers and moneylenders (who became claimants on the surplus), made the producers vulnerable to the vicissitudes of distant markets, and removed all elements of informality and discretion which had existed under the old system. In short, poverty not only increased but also was 'modernized' by becoming associated with insecurity. This is the poverty we witness today.

The Absence of Industrialization

Had there been significant modern industrialization that gave employment to those who had been displaced by the decline of crafts, then this emergence of mass poverty might have been averted. This, however, did not happen. Why it did not happen remains an intriguing question. After all, wages, say, in India were much lower than in Britain (from where substantial emigration had taken place to the temperate regions of white settlement, creating the scope for higher domestic wages); since the technology used in Britain could have been used in India too, why did British capital not shift its entire manufacturing base from Britain to India? Had it done so, then unemployment would have been much lower and wages much higher in India than they actually were, in which case the magnitude of poverty would have been much lower. Why did this not happen?

The contrast here between the experience of the colonies of conquest and that of the colonies of settlement is quite sharp. Unlike the former, the latter saw a spread of industrial capitalism from the original metropolis to their own shores. This diffusion was made possible through capital exports from the metropolis to these new lands; and these capital exports in turn were financed through the 'drain of surplus', mentioned earlier, that was imposed on the colonies of conquest (Bagchi 1972). The divergent experience of the two regions, one consisting of the colonies of settlement and the other consisting of the colonies of conquest, was thus directly related to the divergent treatment accorded to them by metropolitan capitalism. But why was such divergent treatment meted out?

The fact that the export of capital to the temperate regions of white settlement occurred because of the migration of European populations to these lands is generally accepted. In fact the complementarity between the migration of labour and the migration of capital from Europe to these regions is a well-established proposition. But it still begs the question: why did such a contrast occur at all? And different Marxist writers adduce different reasons for it. Baran (1957) highlighted climate as a major factor behind this contrast, while Bagchi (1986) has underscored the importance of the racial element in determining the pattern of diffusion of capitalism.

But whatever the reason, the contrast was crucial. (Whether it is disappearing in the

era of globalization, when capital is far more mobile and is no longer tied to European migration, will be discussed below.) What it meant was that the colonies of conquest experienced encroachment by capitalism but did not witness any significant development of the capitalist mode of production (Mandel 1969). Rosa Luxemburg (1963), perhaps the only one among the classical Marxist writers to have brought capitalism's encroachment into the pre-capitalist sector to the centre of Marxist theory, nonetheless saw this encroachment as simultaneously entailing a spread of the capitalist mode of production (though there are stray remarks in her opus where she visualized the pre-capitalist sector lingering on as a pauperized and degraded entity). This, however, did not happen. What was witnessed was not the spread of the capitalist mode of production to cover the entire world, but the continued existence of a squeezed and degraded pre-capitalist sector.

It is clear in this context that Marx's remark that the more advanced capitalist country shows to the less advanced one a mirror of its own future³ was applicable only to the metropolitan economies of Europe and to economies where the European migrants settled; it was not applicable to the colonies of conquest, semi-colonies and dependencies, that is, not to the Third World. The capitalist production that the latter saw during much of the colonial period was confined to plantations, mining and some local manufacturing, dominated by metropolitan capital, for the export market (such as jute).

It was in the inter-war period that there was notable development of industrial capitalism in the Third World, led by a domestic capitalist class. The fact that this development was more pronounced in Latin America than in Asia should cause no surprise: the former had shaken off colonial dominance to which the latter was still subject. But it gives some credence to Frank's view that periods of world capitalist crisis are actually more conducive to Third World industrialization. It is important, however, to add a proviso: only if appropriate political conditions are created in class terms. In Latin America, import-substituting industrialization of the inter-war period occurred where the hegemony of the erstwhile ruling-class alliance, consisting of comprador bourgeoisie and big landlords, was successfully challenged; where it was not, as in Argentina, the tempo of industrialization remained subdued (Furtado 1976).

POST-DECOLONIZATION TRAJECTORY OF DEVELOPMENT

The second issue of Marxist theory that I take up for discussion relates to the trajectory of development in Third World economies after decolonization. Central to Marxist theory in this terrain has been the distinction between two paths of development. One path is the so-called 'Prussian path' (typically adopted by countries developing capitalism at a later stage), where the bourgeoisie, threatened by a proletariat that has already acquired greater revolutionary consciousness since the lateness of its arrival exposes it directly to the revolutionary socialist movement, enters into an alliance with the landed interests. What develops as a result is landlord capitalism ('junker capitalism' in Prussia) or what Lenin (1977) called 'semi-feudal capitalism', where land concentration is not broken, landlords' power is not broken, wealth and income inequalities remain quite

³ This remark was made in the Preface to the first German edition of *Capital*. See Marx (1983).

acute, and hence the size of the home market remains restricted. This has the effect of weakening the base of democracy (a point emphasized by Barrington Moore Jr 1993) and of making the quest for external markets a compelling one. The other path, the 'French path' (because France after the revolution constitutes its classic example), is where the bourgeoisie carries out land redistribution, breaks the power of the landlord class and therefore both keeps down wealth and income inequalities and provides a more sound basis for democracy.

This distinction was central to Lenin's thinking. It provided for him the basis for the formation of a worker-peasant alliance in countries entering late into the capitalist arena: since the bourgeoisie in such countries was incapable of breaking the landlords' power and hence carrying out the 'democratic revolution', it became the duty of the working class to carry out this 'bourgeois task' and free the peasantry from the shackles of feudal and semi-feudal landlordism. The proletariat's seizure of power became necessary in such countries for carrying out the democratic revolution; and it became possible because a worker-peasant alliance could represent the overwhelming majority of the population despite the working class itself being relatively small. Of course, having carried out the democratic revolution (or taken it to completion), the proletariat would not remain content; it would move forward from the democratic to the socialist revolution by appropriately changing the nature and composition of the worker-peasant alliance in a manner discussed by Lenin in his *Two Tactics of Social Democracy in the Democratic Revolution* (1976). The Bolshevik agrarian programme of that time of course had talked only of the nationalization of land rather than its redistribution among peasants (Lenin 1962), which was changed at the time of the revolution; but the distinction between two paths clearly underlay that programme.

Foregrounding land reforms, including in particular radical land redistribution through a break-up of large landed property holdings, became the universal slogan of the left; whether a regime carried out land reforms or not became a litmus test of its progressive intent and the basis for judging whether it was embarking upon a 'pro-people' development trajectory. And this was not just confined to the political left that derived inspiration from Lenin. It also occupied centre-stage in academic discussions on the agenda for overcoming the problem of underdevelopment.

This was so with good reason. The development of landlord or semi-feudal capitalism in the countryside, which is part of the trajectory of 'capitalism from above', not only entails all that Lenin had talked about; in addition it keeps the development of productive forces in agriculture itself arrested. And since Kalecki (1972) showed that the rate of non-inflationary growth – that is, growth not impinging on the real earnings of the working population – depended essentially on the rate of growth of agricultural, especially food-grain, production, such arrested development of agriculture constrained the overall growth process. An arrested growth of domestic food-grain output, especially in countries not endowed with oil or other rich mineral resources that could be traded internationally for food, would entail either overall stagnation (if inflation in terms of the wage unit was to be avoided), or rapid inflation at the expense of the real earnings of the working population (if stagnation was to be avoided).

Land Reforms, Agricultural Growth and Inflation

The link between land reforms and the pace of agricultural growth in Third World economies was seen, *inter alia*, in terms of the rent barrier (U. Patnaik 1976; Joan Robinson 1979). (This argument too had been mentioned by Lenin in asking for the nationalization of land.) In such economies, for reasons already discussed, there is intense pressure of population on land, resulting in high land rents. The introduction of a new method of production, essential for raising land productivity, and hence the rate of growth of agriculture (given the limited size of the land area), would require both direct cultivation by the landlord-capitalist (instead of his leasing out the land on rent) and an investment on land for introducing the new method. The new method would therefore be introduced only if it earned an amount equal to the sum of the profit (at the going rate) on the capital invested for it and of the rent foregone because of direct cultivation. High rent thus places a barrier against the introduction of new methods: such methods have to be extraordinarily profitable (at going input prices) to overcome the rent barrier. Hence the barrier restricts the introduction of new methods for raising land yields and thereby the rate of agricultural growth. Landlord capitalism therefore is innovation-discouraging in a way that cultivation by peasants of the land they own is not, which means that not carrying out land reforms arrests the development of productive forces in agriculture and precipitates either overall relative stagnation or high inflation.

The link between land reforms and growth prospects can be put more precisely, as follows. Over any particular period, for any given rate of agricultural (especially food-grain) growth, one can think of a locus of points representing alternative combinations of the overall economic growth rate and the inflation rate in terms of the wage-unit. This would be an upward-sloping curve, since a higher overall growth rate for a given food-grain growth rate over this period would mean a higher inflation rate. What land reforms do is that, by raising the food-grain growth rate, they shift this curve, so that any particular overall growth rate is now associated with a lower inflation rate.

The Struggle against the Big Bourgeoisie and Foreign Capital

Since the bourgeoisie, especially the 'big bourgeoisie', in Third World countries strikes an alliance with the landlord class to ward off political challenges from the working class to its hegemony, the struggle for an alternative trajectory involving land reforms must mean a struggle not just against the landlords but also against the big bourgeoisie. It followed from this that the only authentic trajectory of development, based on a high growth rate of agriculture and avoiding inflation that erodes real wages, would be one that was proceeding towards socialism. It followed, in other words, that capitalist development, which necessarily had to be under the leadership of the big bourgeoisie, presented a false trail.

Breaking land concentration and the power of the landlord class, however, was seen as only one component of the democratic revolution; another crucial component was to reduce the power of foreign capital, for which the public sector had to be built up. In the colonial period metropolitan capital had controlled mineral resources, plantations and sectors that serviced the appendage status of the 'underdeveloped economy', such as finance. In order to regain control over these resources, it was necessary to displace foreign capital from this position. Not only was the public sector the obvious instrument

for this, but it could also be used for developing the domestic heavy-industry base and technological capability (since domestic private capitalists in any case spent very little on research and development), which was essential for shaking off imperialist hegemony. The post-decolonization trajectory that Marxist theory advanced included, apart from land reforms and restrictions upon the big bourgeoisie, the removal of foreign capital from its dominant position and the development of the public sector as a bulwark against it. Where political organizations representing the workers and peasants could seize state power, they could embark on this trajectory straightaway. But even where this was not possible, it became nonetheless the political left's alternative, the agenda favoured by it.

Petty Production and Collectives

Marxist theory did not, of course, visualize a perennial presence of petty production. Even while arguing for land reforms, it saw the break-up of landlord property and the distribution of land to peasants as being a forerunner of co-operative or collective forms of production. This was considered essential not just for effecting a transition to socialism via the intermediate stage of collective ownership, but also for immediate and direct economic reasons, having primarily to do with the possibility of 'costless' capital formation.

Unused labour can be put to work on capital projects without either reducing existing production (since the labour is unused anyway) or even having to be paid in advance before the fruits of the projects by way of larger output have appeared (since it is getting a subsistence level of consumption anyway). Hence unused labour can be directly and 'costlessly' transformed into assets that, if properly chosen, can raise agricultural production.

The obstacles to the use of unutilized labour, however, arise from three sources. Firstly, unused labour within each household is not necessarily available in discrete units. For instance, as long as farming is done by the households, two hours of labour time may be available in a particular household on a particular day but not on another day. Making use of these two hours becomes difficult for the household. Secondly, if an asset increases the agricultural production not exclusively of one household but of several households, then sharing the benefits poses a problem. And, thirdly, if the unused labour of a household is used for a project that brings benefits to many households, then the worker would demand a wage for working on it, in which case capital formation no longer can remain 'costless'.

Collective agriculture resolves all these problems. The pooling of labour overcomes the problem of discreteness. The question of benefit-sharing disappears, since the benefit now accrues to the collective as a whole, which has certain specific product-sharing rules anyway. And since payment for labour can be deferred within the collective to the next period, by which time the increased output would be accruing on the project, capital formation does become 'costless'. The possibility of 'costless' capital formation discussed by Dobb (1951) and Nurkse (1966) was realized quite significantly by the Chinese communes, which built up substantial commune assets through these means without relying on any central-plan funds.

Restricting the Pace of Structural-cum-Technological Change

Utilizing unused labour for costless capital formation within a collectivist or co-operativist agriculture was not the only means visualized by Marxist theory for eliminating unemployment. The basic idea was to shift labour out of agriculture altogether, into secondary and tertiary activities at decent wage levels. This required not only a rapid growth of these sectors (which, since it would be sustained by a high rate of food-grain growth as well, would be non-inflationary), but also restraints on the pace of structural-cum-technological change within them.

A particularly high rate of structural-cum-technological change would be typically associated with a high rate of growth of labour productivity. Since the rate of growth of output is the sum of the rate of growth of employment and the rate of growth of labour productivity, a high rate of growth of labour productivity keeps down employment growth and makes the shift of the workforce out of agriculture that much more difficult. Even if unemployment is taken care of within collective or co-operative farms in the ways discussed above, if the conditions of the workers are to improve, they have to shift to sectors with higher labour productivity, for which these sectors should generate sufficient demand for labour. High labour-productivity growth in these sectors comes in the way of their generating such demand. It followed therefore that there had to be restrictions on the pace of structural-cum-technological change.

This meant, however, that the pattern of demand could not dictate the production of goods. Just as, for example, the demand for imported goods could not be satisfied by making such imported goods freely available, likewise the demand for newer goods could not be fully satisfied if full employment at a decent wage had to be achieved.

While this necessarily implied the existence of some controls, the rigours of such controls could be mitigated by two factors. Firstly, the demand pattern favouring a change in the pattern of production that entails a high rate of growth of labour productivity is itself linked to the distribution of incomes: a more egalitarian distribution is associated with lesser pressure for rapid technological-cum-structural change and hence for a rapid increase in labour productivity. Since implementing the agenda favoured by Marxist theory would keep down income inequalities, it would also keep down the pressure for technological-cum-structural change and hence the rigours of a control regime.

Put differently, since the purpose of controls is to effect a divergence between the *ex ante* pattern of demand and the *ex post* pattern of availability of output, and since the magnitude of divergence varies directly with the level of income inequality, the agenda favoured by Marxist theory, by keeping down income inequality, would also keep down this divergence and hence limit the rigours of the control regime.

Secondly, Marxist theory visualized not only the non-promotion of consumerism (such as is manifested in the desire for newer goods), and not only the non-realization of consumerism through the imposition of controls, but above all the promotion of a cultural ethos that rejected consumerism. With such a cultural ethos, of course, the need for controls gets correspondingly lessened.

THE RELEVANCE OF MARXIST THEORY IN THE ERA OF NEOLIBERALISM

The agenda emerging from Marxist theory as discussed until now has been abandoned not only in countries that pursued a *dirigiste* economic strategy while building capitalism, such as India, but even in China, where no matter how we characterize the system that exists today, there has been a rolling back of collectivization and an open door for foreign capital. What is more, the high rates of growth of a number of East Asian economies, and the fact that official poverty measures in these economies show a clear decline, are taken to demonstrate that the proposition that underdevelopment, with its accompanying mass poverty, cannot be overcome through capitalist development, is false. How can Marxist theory cope with these facts which apparently are at variance with its conclusions? This brings me to the third issue of this chapter.

I shall not be discussing here the facts that supposedly are at variance with the conclusions of Marxist theory; I shall rather reconstruct the theory, taking into account the work of a number of Marxist writers in a manner that establishes its continuing relevance. Since Marxist theory is not meant to be a closed body of ideas, but needs to be continuously reconstructed on the basis of a certain core conceptual framework, for comprehending existing reality with a view to changing it, such an attempt at reconstruction is perfectly legitimate for Marxist theory.⁴

The phenomenon of globalization, involving freer flows of commodities and capital across national boundaries, which has made possible the 'spontaneous' diffusion of activities from the capitalist 'core' to some Third World economies, especially in Asia, also has certain other important implications. The enormous superstructure of finance that has been built up under globalization makes it imperative that the value of money at the capitalist core should remain stable. If this does not happen, then money and money-denominated assets, as a form of wealth-holding, would be progressively abandoned in favour of commodities. The maintenance of a stable value of money by preventing inflation, which is always important for capitalism, becomes particularly important in the new situation.

One mechanism that capitalism has always used towards this end is the maintenance of a reserve army of labour, a proposition of Marx that, starting with Joan Robinson's concept of an 'inflationary barrier', recent work in economics has been increasingly forced to recognize through its concept of a non-accelerating inflation rate of unemployment or NAIRU (with the mainstream version even claiming that the reserve army constitutes only a 'natural rate of unemployment', so that despite its existence there is *de facto* full employment). But Marx's discussion of the reserve army of labour was in the context of a picture of the capitalist economy in which imports from the periphery did not figure explicitly. Since the threat to the value of money may arise not only from autonomous increases in money wages within the core but also from increases in the prices of imported goods (which can then stimulate money-wage increases at the core), stability in such import prices requires, *inter alia*, the absence of any autonomous wage-

⁴ The proposition that Marxist theory needs to be continuously reconstructed is discussed in Patnaik (1999).

push in the periphery itself, for which a reserve army needs to be maintained in the periphery too.

This reserve army in the periphery has an even more important role, apart from preventing an autonomous push to the prices of goods imported to the core; and that consists in making the producers of such imported goods price-takers, to absorb inflationary pressures arising elsewhere in the system. In the absence of a group of such price-takers the slightest push to prices, arising from whatever source (including an autonomous rise in the profit mark-up via a rise in what Kalecki had called the 'degree of monopoly'), would create an inflationary spiral at any given level of capacity utilization at the core (Patnaik 1997). The size of the reserve army in the periphery therefore has to be large enough to make the producers there act as price-takers.

This has never been a problem for capitalism since, for reasons already discussed, capitalist penetration into the Third World had itself generated mass unemployment and mass poverty, which continue to persist. But the development of Third World economies to eliminate mass poverty and unemployment (one cannot happen without the other) would, for this very reason, undermine the stability of the world capitalist system. To argue that the spontaneous diffusion of activities from the core to the periphery (not diffusion enforced as earlier through protectionism in the periphery and the consequent import-substituting industrialization⁵) can overcome the state of underdevelopment in the world as a whole under the aegis of capitalism is therefore theoretically untenable.

Such universal overcoming of underdevelopment requires a substantial exhaustion of the global reserve army of labour,⁶ especially of that large component of it which is located in the periphery. Such exhaustion, however, would undermine the stability of world capitalism. Some exhaustion may not cause such undermining, but any substantial exhaustion would.

Commodities with Increasing Supply Price

There is an additional point here to which I now turn. The capitalist mode of production requires a whole set of goods, both raw materials and wage goods, that have two basic characteristics. Firstly, they are either the products of a tropical land mass of fixed size which cannot be augmented, or are exhaustible natural resources with no assurance of substitutes becoming available when the demand for them expands. What this means is that they are subject to an increasing long-run supply price for any given money wage rate per efficiency unit of labour. Secondly, these goods are produced in regions far from the home base of capitalism and under modes of production which, though encroached upon by capitalism, are not themselves capitalist.

Before discussing the implications of these two characteristics let us first see whether they are valid. The product of the tropical land mass can no doubt be expanded, despite the fixity of the geographical mass, through land-augmenting technological progress, and such technological progress can be effected through investment. But typically such investment is best undertaken by the state. Irrigation, for instance, which is land-augmenting,

⁵ See Patnaik (1997) for a discussion of the distinction between these two types of diffusion.

⁶ The term 'global reserve army of labour' has been used in Bellamy Foster et al. (2011).

as it makes multiple cropping possible, has traditionally been undertaken by the state. Private profitability calculations rule out such investment as returns are uncertain and capital requirements immense. But precisely in the period other than the *dirigiste* period, state investment becomes limited.

In the colonial era, the doctrine of ‘sound finance’ ruled under the Gold Standard, which meant that public investment was limited. After allowing for the ‘drain’ and for normal government expenditure, what remained with the fisc in these economies of the periphery was inadequate for any major public investment in irrigation. (The Canal Colonies of the Punjab were an exception, and the experiment was not replicated anywhere else in the entire colonial world.) The recent period of neoliberal economic policies is again characterized by a combination of tax concessions for big capital (to induce it to invest) and ‘fiscal responsibility’ (which means keeping down the fiscal deficit relative to gross domestic product). These combine to restrict public investment. Land augmentation, for which public investment is essential, becomes difficult under these circumstances.

But the demand for the products of this land mass arising from the fact of capital accumulation (and the growing incomes that accrue as a result) rises over time. This is true not necessarily of direct demand, but of total demand which includes direct and indirect demand, the latter including demand in the form of Leontief-type inputs. What is more, if we assume that capitalist development is raising people in certain parts of the Third World above poverty by increasing their real income, then it must be true that the demand for products of the tropical land mass should be rising. Even if we take the direct and indirect demand for cereals alone, we find, from pooled cross-section and time-series data for countries, that it is an upward-rising curve when plotted against per-capita real income, which plateaus at a very high level of income that even the fast-growing under-developed countries are still far from attaining (Ram 2013).

It would follow that the prices of such commodities should be increasing with capital accumulation if people in certain parts of the Third World are experiencing increased real incomes. But an increase in these prices destabilizes the value of money in the capitalist world (Patnaik 2010). If money is linked to gold, as the US dollar was under the Bretton Woods system, then a rise in prices of commodities would entail a rush from currency to gold (since the gold price is generally expected to move in tandem with commodity prices, whence the expression ‘as good as gold’). On the other hand, where the currency is not linked to gold, such a currency system itself would become unviable, since people would rather hold gold than any currency. In other words the value of money would be under threat in such a universe where there are commodities whose production is subject to an increasing supply price; and if so, then the entire value of financial assets would be under threat.

In short, concern with the value of money, far from decreasing, actually increases many-fold with the progress of financialization. And the maintenance of the value of money requires that the phenomenon of an increasing supply price should be kept in abeyance. How is this achieved?

Squeeze on the Absorption of Goods

There are at least three ways in which the phenomenon of increasing supply price is kept in abeyance. The first is through a squeeze on the absorption of the goods within the

segment itself where such goods are produced. This compression is achieved by imposing upon this segment an 'income deflation' (U. Patnaik 1996). If the colonial taxation system was the instrument of income deflation earlier, and hence a mechanism for imposing a compression of demand on the colonial and semi-colonial economies that produced these goods, neoliberal economic policies in the era of globalization perform the same task today. Through fiscal austerity and other such means, the purchasing power in the hands of the Third World pre-capitalist producers is kept down, releasing supplies of goods without raising their supply price.

The second way is by ensuring that with the process of capital accumulation, the demand for such goods, emanating outside the producing segment itself, does not increase. For this wages are kept down not just in Third World capitalism but even in advanced capitalism. This is spontaneously achieved to an extent, because with the mobility of capital under globalization, real wages in the advanced capitalist countries are also subjected to the constraining effects of Third World labour reserves. This in turn means that despite capital accumulation real wages do not increase. The rise in labour productivity therefore increases the share of surplus, and brings about, for reasons discussed earlier, a pattern of demand that entails little increase in employment. We then have a situation where global demand for goods produced by the limited tropical land mass increases very little.

The third is through inflation in terms of the wage unit in the producing countries that is offset by an exchange-rate depreciation. While inflation in terms of the wage unit (or 'profit inflation' as Keynes had called it) releases supplies of these goods required in the metropolis, the depreciation of the exchange rate ensures that the price of such goods in terms of the metropolitan currencies does not increase. The value of their money in other words is not threatened even though inflation occurs in the periphery to squeeze out supplies of such goods for the metropolis.

This is where the argument mentioned earlier, about the need for a group of price-takers, becomes relevant. For profit inflation to work, money wages (or more generally money incomes of those at whose expense the 'forced savings' are generated) must not rise *pari passu* with prices. This is ensured by the fact that such groups in the periphery from whom forced savings are squeezed out are located in the midst of substantial labour reserves that impair their ability to maintain real incomes in the face of inflation.

To the extent that these methods are used (and they have to be), the idea of capitalist development overcoming underdevelopment in general – that is, overcoming underdevelopment in the world as a whole – becomes untenable. The objection that would be raised against the foregoing is that the weight of the tropical commodities in either the imports or the expenditure or (as inputs) in the gross value of output of the metropolis is so small that postulating a threat to the value of money in the metropolis arising from this source is unrealistic. But as Harry Magdoff (1969) pointed out long ago, even if the weight of raw materials in the gross value of manufacturing output is small, it is still the case that no manufacturing can be done without raw materials. Capitalism cannot do without these use values even if their exchange value is small (which itself is a manifestation of an imperialist squeeze in the form of 'unequal exchange'; Emmanuel 1972; Amin 1976). Besides, in discussing the threat to the value of money, of note is the fact that money may be substituted as a form of wealth by some commodity (or gold) whose price is rising

fast. What weight that commodity has in the consumption basket of the metropolis is not immediately germane to the issue.

To sum up, the stability of capitalism requires that the value of money be kept stable at the core by preventing any inflationary threats to it. For this, not only must substantial global labour reserves be maintained, but in addition income deflation must be imposed to ensure that supplies of commodities subject to increasing supply price are obtained to meet the growing demand generated by capital accumulation without any actual increase in their output (for any such increase in output would bring into play the phenomenon of increasing supply price). Meeting these requirements for the stability of the value of money under capitalism precludes the overcoming of underdevelopment. In short the stability of world capitalism necessitates the perpetuation of underdevelopment.

Capitalism and Underdevelopment under Neoliberalism

What this means should be carefully interpreted. It does not obviously mean that the quality of life of the people in the underdeveloped countries does not change, or that life expectancy or the maternal mortality rate or the infant mortality rate do not change. A good deal of such change in any case occurs merely as a result of the availability of new drugs, new knowledge about living practices, new information about medical possibilities and the provision of fairly rudimentary healthcare facilities. And even though the period of neoliberalism entails more expensive access to medical facilities compared to the *dirigiste* period, the fact of there being a notable improvement in the quality of life of the people today compared to the colonial period is indubitable. The real issue relates to employment and food absorption: overcoming underdevelopment must mean an improvement in food absorption and employment. But here again one has to analyse with care.

The argument presented above states that overcoming underdevelopment undermines the stability of capitalism. But of course there are historical periods when the balance of class forces is such that capitalism is forced to make concessions that could even jeopardize its stability. Decolonization was one such concession. It occurred at a time when capitalism, devastated by war and threatened with the spectre of rising communism, was forced to make concessions (the social-democratic welfare state being another instance of such a concession). The *dirigiste* regimes that came into power in Third World countries as a result of decolonization, even those that promoted the development of a relatively autonomous 'national' capitalism, being the legates of the anti-colonial struggle, took a number of steps to improve the conditions of the population. Among these were measures to bring about 'land augmentation' and hence increase the per-capita food absorption of the population even while accelerating the rate of economic growth compared to colonial times. With neoliberalism and the rolling back of *dirigisme* we once again have a greater expression of the spontaneity of the system, which again entails fiscal austerity and a tapering off of land augmentation (so that income deflation as a means of stabilizing capitalism assumes importance), and with it a decline in per-capita food availability in the Third World.

Likewise we once again have the reintroduction of spontaneity in the pace of technological change. Given the size of the reserve army of labour in these economies, the real wage rate remains unchanged even as labour productivity increases, raising the share of

surplus in the economy, which in turn, if it is realized at all – that is, if there is no problem of deficient aggregate demand – is realized through larger investment and larger consumption by the capitalists and the strata that live off the surplus (Peter Struve's 'third persons'⁷). The latter forms of expenditure, whose share in total output increases as a result, are in general less employment-intensive than the consumption of the working population, an important reason for which is the fact that among those living off the surplus the desire is to emulate the consumption patterns prevailing in advanced capitalist countries. The latter being in general less employment-intensive, this also carries over into the consumption patterns of those living off the surplus in peripheral economies.

Hence the spontaneous growth process unleashed under neoliberalism, even when it is not crippled by a deficiency of aggregate demand, increases the share of surplus in output and hence the rate of growth of labour productivity, which means that employment growth is correspondingly curtailed, and the labour reserves never get used up. We therefore have a self-perpetuating process where the prevalence of vast labour reserves keeps down real wages and keeps increasing the share of surplus, which in turn, by constraining the employment-intensity of production, perpetuates the labour reserves. The labour reserves in short are not exhausted; if anything there is even an increase in their relative magnitude.

The reason for such an increase in the relative magnitude of labour reserves lies in the very fact of income deflation mentioned earlier. Such income deflation affects not only the demand of the working people in the peripheral economies but also the supplies forthcoming from the petty production sector, since it makes even 'simple reproduction' – that is, carrying on with an unchanged level of activity – difficult for these producers. Income deflation, in other words, gives rise to a process where traditional petty producers, such as peasants, fishermen, craftsmen and artisans, leave their traditional occupations to seek employment in urban areas and swell the army of job-seekers. This army is now recruited not only from the natural increase in population but additionally from those who are forced to leave their traditional occupations. With employment growth restricted for reasons discussed above, this often entails an increase in the relative size of the reserve army of labour.

The reason why the erstwhile socialist countries had managed to use up their labour reserves and even become labour-shortage economies was, *inter alia*, the restriction on the pace of labour-productivity growth. But if the production pattern responds to the pattern of demand, which is determined by income distribution, then the economy gets caught in a vicious circle where the labour reserves never get exhausted.

We thus have a situation where, notwithstanding changes in the quality of life compared to the colonial period, in the crucial areas of food absorption and employment the peripheral economies continue to languish. Since overcoming underdevelopment must be defined primarily with regard to these areas, such overcoming does not occur, no matter how high the rate of growth of output may be in these economies.

The fact that some economies appear to have overcome underdevelopment even within the framework of capitalism, or even without putting into practice the development agenda put forward by Marxist theory, does not negate the validity of this theory. The

⁷ Peter Struve's views are discussed in Luxemburg (1963) and Mitra (1977).

facts regarding their overcoming mass unemployment and hunger have to be carefully examined first; and even if these facts may be true in some instances, we have to consider the periphery as a whole, where no such tendency is evident.

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18. Economic development as an evolutionary process*

Richard R. Nelson

In this chapter I argue that modern evolutionary economic theory provides a much more adequate framework for understanding the economic development process than the neoclassical theory that for many years has dominated mainline economic thinking. I begin my argument by laying out the basic differences between the two theoretical points of view. I then go on to propose that an adequate theory needs to recognize the rich mix of institutions that are involved in economic activity – not just firms, households and markets – and also that the varied roles of government cannot be understood simply as responses to ‘market failures’. While the early articulations of evolutionary economic theory did not encompass the institutional variety and complexity of modern economies, institutions play a central role in more recent writings. I then will develop the argument that economic development involves the co-evolution of the technologies known and in use, and the institutions supporting and regulating these. This is exactly the perspective provided by modern evolutionary economic theory.

THE BASIC DIFFERENCES¹

At the broadest level, and possibly the deepest, the difference between the evolutionary economic theory that is taking shape, and the neoclassical theory that has dominated microeconomic theorizing over the last half-century, is that evolutionary theory sees the economy as always in the process of change, with economic activity almost always proceeding in a context that is not completely familiar to the actors, or perfectly understood by them. In contrast, neoclassical theory sees the economy as at rest, or undergoing well-anticipated change, in any case with actions appropriate to the context, something the decision-makers have learned through relevant experience or can calculate accurately based on what they know reliably. In turn, this difference in the way the economic scene is interpreted leads to important differences in the operational parts of the theories.

One basic consequence of the difference between the two theories in how the economic context for action is viewed, is that they put forth very different views on what is meant by ‘rational’ behavior. Both theories assume that individual and organizational

* Earlier versions of this chapter were given in a keynote address I presented at the October 2004 meeting of Globelics, held in Beijing, China, and at a symposium in honor of the memory of Sanjay Lall (Nelson 2008).

¹ I will not discuss here the differences in the styles of formal modeling in the two theories, save to note that formal modeling in evolutionary theory tends to take the form of dynamic systems that at any moment may be far from an equilibrium, while formal neoclassical models almost always assume that an equilibrium obtains. My focus here is not on formal modeling, but on what Sidney Winter and I (Nelson and Winter 1982) have called ‘appreciative theory’: that is, theory that aims to capture the basics of what actually is going on.

economic actors pursue objectives, usually in a reasonably intelligent way. However, the 'rationality' of actors in evolutionary theory is bounded, in the sense of Herbert Simon (1955). There is no way they can fully understand the context in which they are operating, yet they have to cope somehow. To a considerable extent the coping involves the use of routines that have in the past yielded satisfactory results. But the actors in evolutionary theory also have the capability to do something new, to innovate, if they think they see an opportunity, or when what they have been doing becomes clearly inadequate in a changed context.

This is a very different view of economic behavior from one that presumes that the actors face given and fully understood choice sets and make optimal choices given those sets. The latter may make sense if one could assume that the economic context is basically unchanging, that economic actors have had sufficient experience to learn what works and what does not in that context, and that there has been sufficient time for selection to winnow out or force transformation of incompetent behavior. But if the economic context tends to be in flux, with change coming both from changes in external conditions and from developments internal to the operation of the system, such a presumption is misleading. It blinds analysis to the fact that economic actors in many cases may operate in ways that have sufficed in the past, but which may be far from the best that can be done given current conditions. It misses the uncertain groping that almost always characterizes individual and organizational action in contexts that are poorly understood, and the fact that individual and organizational actors often can and do behave in innovative ways.

A related difference between the two theories is in how they conceive of good economic performance. Neoclassical theory proposes that the performance of an economy should be judged in terms of how close it is to a theoretical optimum. In evolutionary theory there is no theoretical optimum, since the range of possibilities for economic action is always changing, generally growing, but in a way that cannot be predicted or specified in detail. Economic performance is seen in terms of the rate and nature of progress.

The focus of modern evolutionary economic theory on economic progress is scarcely a radical new departure. Indeed Adam Smith, in *The Wealth of Nations*, was basically concerned with illuminating the processes of economic development and the institutions supporting the key processes. Much of his comparative analysis was concerned with identifying the reasons why some countries seemed to have been making significant progress, while others seemed stagnant. This orientation towards economic progress, the factors stimulating progress and those limiting it, remained central in economic analysis until the development of neoclassical theory pulled the focus more sharply towards the properties of a hypothetical economic equilibrium.

I also want to note, or rather to highlight, that most of the useful understandings that are contained in modern economics are not tied to modern neoclassical theory with its focus on conditions of hypothetical equilibrium. Propositions like 'demand is responsive to price', 'competition tends to keep prices in line with costs', 'an economy in which markets play a significant role has a capacity for self-organization and adaptation to changes in basic economic conditions' and 'attempts to give detailed direction to an economy from the center tend to be incompetent or worse', are not dependent on 'theorems' derived from modern neoclassical economic theory. You will find all of the above in Adam Smith, more than 200 years ago.

Of course modern evolutionary theory has been strongly influenced by Schumpeter.

It is interesting, and relevant, that in his *Theory of Economic Development*, Schumpeter (1934) used the concept of a circular-flow equilibrium, where habitual, customary behavior sufficed, indeed was hazardous to abandon, as the vehicle to contrast with what is involved in economic development, where innovation was driving change, and the system was out of equilibrium. Schumpeter's conception of behavior in the circular flow was his interpretation of Walrasian general equilibrium. His characterization of the circular flow is an interesting way of specifying the conditions under which modern neoclassical economics would provide a reasonable analysis of what was going on, at least if maximizing behavior is interpreted, as it was by Milton Friedman (1953), as a way of 'predicting' and describing behavior that has been winnowed by learning and competition. I note that modern economic evolutionary theory becomes very similar to neoclassical theory and generates a continuing equilibrium 'circular flow' of economic activity, when innovation is shut down for an extended period of time. But Schumpeter's basic point was that if innovation is an important part of what is going on, this characterization of economic activity is inappropriate.

I would like to highlight a particular aspect of Schumpeter's treatment of innovation in his *Theory of Economic Development* that he carries over into his later *Capitalism, Socialism, and Democracy* (1950), because it is a central element of evolutionary theory. It is the presence of uncertainty. I note here that Schumpeter's concept of uncertainty is close to that of Frank Knight (1921): the absence of sufficient relevant experience for the actor to estimate relevant probabilities reliably, or even to list in any detail the states of affairs that might materialize after an action is taken. The essence of trying something new, of innovation, is that what will happen is uncertain in this sense, with success never a sure thing. And where and when a considerable amount of innovation is going on, being done by different economic actors, the current context is particularly uncertain. In such a context, considerable progress may be being made by the economy as a whole, but through a process of 'creative destruction' that involves losers as well as winners. The evolutionary economic theory that Sidney Winter and I helped to develop, as an alternative to neoclassical theory, was strongly inspired by Schumpeter.

However, there is an important blind spot in Schumpeter, which I would like to flag up here, that also was there to some degree in the early articulations of evolutionary economic theory. It is the failure to recognize the institutional complexities of modern market economies. Of course the same problem is there in neoclassical economic theory. Indeed one explanation for the institutional oversimplification in Schumpeter and in early modern evolutionary theory is that, in focusing their attacks and proposals for reform on the limitations of the equilibrium concept, the writers failed to pay sufficient attention to the spare institutional assumptions of that theory. The theory contains firms that employ inputs to produce outputs. There are households that supply primary inputs and purchase final outputs. And there are markets that somehow work, through the adjusting of prices, to equilibrate supply and demand. That is it.

The innovation-systems strand of research is designed to enrich this overly spare institutional picture. It does so in two somewhat distinct, but overlapping ways. One is to recognize the complexity of many market relationships, their embedding in broader social and institutional structures, and the elements of cooperation and trust that often are essential if markets are to work well. The other is to highlight the role of non-market institutions, like university and public-research systems, scientific and technical societies

as well as government programs, in the innovation process in many sectors. While there has been a tendency in the innovation-systems literature to focus on institutions involved in the early stages of the innovation process, particularly research and development (R&D), some treatments also include in the innovation system the labor market, the education system, financial institutions, regulatory structures and other institutions that shape economic dynamics more broadly.

Particularly the latter strand makes the research on innovation systems very much part of the recent broad movement in economics to develop a new institutional economics. While sometimes not recognized for what it is, this is a major step away from the Walrasian model. However, I think it fair to say that there are significant differences between the adherents to a richer institutional view who, in other regards, try to hold on to the basic tenets of neoclassical theory, and those coming from evolutionary economics who thus far mostly have been associated with the innovation-systems writings.

One important difference is that in the neoclassical writings, the normative justification for structures that regulate markets and for non-market structures more generally is posed in terms of 'market failures'. The evolutionary theoretic view on this, or at least my view, is that this mode of normative analysis involves a major asymmetry and often obfuscates understanding. Once one recognizes the wide range of institutions involved in economic activity, and acknowledges as well that no particular institution ever works 'perfectly' in any real context, the asymmetry involved in justifying non-market modes simply in terms of the inadequacy of markets stands out. It becomes apparent that normative analysis needs to be oriented towards comparing imperfect alternative modes of organization and governance, and possible mixes of them.

Thus public funding of basic research, conducted largely at public laboratories and universities, is a reasonable policy not so much because of 'market failure', but because well-allocated basic research spending yields high expected social returns, and publicly funded research conducted at public institutions would appear to be the best way of getting certain kinds of research done and the results made available for general use. Similarly, it makes much better sense to argue for well-designed industrial policies in terms of high expected pay-offs (if in fact that can be argued) than to go through a litany of 'market failures' that might justify such policies.

Another important difference between a neoclassical and an evolutionary perspective on institutions and institutional change goes back to the basic differences in the theories I discussed above. Neoclassical economists tend to see institutions as created through and operating as they do because of the maximizing behavior of economic agents and prevailing institutions as an equilibrium configuration. In contrast, evolutionary economists tend to see the institutional structure as always evolving.

EVOLUTIONARY ECONOMIC THEORY AS GROWTH THEORY

The empirical research during the 1950s and 1960s on the sources of macroeconomic growth firmly established that technological advance was the key driving force. These findings led to a surge of research by economists on the processes of technological advance and to the rediscovery of the features of economic activity where innovation was important, which had been argued years before by Schumpeter. It continues to

puzzle and sadden me that so many of my colleagues in economics interested in economic growth continue to hold on to a neoclassical growth theory that cannot deal adequately with an economic context in which innovation is important. The evolutionary growth models that I and my colleagues developed in the 1980s were, I think, a significant step towards the development of a viable theoretical alternative. However, as I mentioned above, those early evolutionary analyses lacked a way of seeing into the complex institutional structures that characterize modern economies.

I think that, as a result of bringing institutions under the umbrella of evolutionary theory, evolutionary economics now has the capability to provide a broad, coherent and useful theory of economic growth as experienced in the advanced industrial economies. A satisfactory growth theory of course has to be able to make sense out of the aggregate time series of output, measured by real gross national product (GNP), and aggregate inputs like labor and physical and human capital. The early evolutionary growth models showed that a growth theory based on evolutionary economics could do this as well as a growth theory based on neoclassical economics.

But I would argue that a satisfactory growth theory has to do a lot more than just that. A satisfactory growth theory should be able to illuminate the important details of growth, qualitative as well as quantitative, that one sees in the accounts of economic historians. And a satisfactory theory needs to specify correctly the basic processes driving economic growth. Otherwise that theory does not explain what actually is happening. The new evolutionary growth theory that is emerging sees economic growth as the result of the coevolution of technologies, firm and industry structures and supporting and governing institutions. I propose that a satisfactory theory of the processes involved in economic growth must consider all three of these aspects, and that the driving dynamics involves their interaction. To illustrate, it is useful to consider several empirical cases.

Let me begin with the rise of mass production in the United States. As Alfred Chandler (1962, 1977) tells the story, the development towards the middle of the nineteenth century of telegraph and railroad technology opened the possibility of business firms marketing their products over a much larger geographical area and, along with the advances that were being made at the same time in the ability to design and build large-scale machinery, opened up the possibilities for significant economies of scale and scope. However, to exploit these opportunities, firms had to be much larger than had been the norm, and the large size posed significant problems of both organization and management. The organizational problem was solved by the emergence of the modern hierarchically organized company, and later by the multi-divisional form of organization. But to manage these huge companies required many more high-level managers than an owner could garner by canvassing family and friends, which had been the usual practice. The notion of professional management came into being, and shortly afterwards business schools emerged as the institutional mechanism for training professional managers. The financial needs of the giant companies were beyond what could be met through existing financial institutions, and both modern investment banks and modern stock markets emerged to meet these needs. All of these developments raised complicated issues of corporate, labor and financial law. Gradually these were worked out. At the same time the market power of the new large firms, and their tendency to collude with each other, gave rise to new regulatory law and antitrust.

Another interesting example is the rise of the organic chemical-product industry in

Germany, as told by Peter Murmann (2003). Here the initiating cause was a breakthrough in the science of organic chemistry. As a result, persons with advanced training in the theory and techniques of chemistry had a special capability for developing synthetic dyestuffs. In order to take advantage of this new capability, business firms had to develop the concept and structure of the industrial research laboratory as a place where university-trained scientists could work with their peers in discovering and developing new products. And the German university system had to gear itself up to train significant numbers of chemists inclined to work for the industry. The various German governments provided significant funding to enable this latter development to happen.

My third case is a more contemporary one: the revolution in pharmaceuticals that has occurred over the last 40 years, particularly in the United States (US). The development during the 1960s and 1970s of molecular biology as a strong science, and the creation of the basic processes used in modern biotechnology, clearly was a watershed. These developments opened up a new route to pharmaceuticals discovery and development, one in which, at least at the start, established pharmaceuticals companies had no particular competences and, at the same time, one where certain academic researchers had particular expertise. Several lines of university-based research began to appear commercially very promising. A number of new biotech firms were formed, staffed by university researchers and their students, with plans to develop new pharmaceuticals and either to license the successful results or to go further downstream into the pharmaceuticals business themselves.

There were two institutional factors that enabled and encouraged these developments. One was the traditional openness of American universities to entrepreneurial activity on the part of their researchers. The other was an established venture-capital industry, which quickly came to see the finance of biotech start-ups as a potentially profitable business. In 1980 a key legal decision assured skeptics that the products of biotech could be patented. At the same time, Congress passed the Bayh–Dole Act, which encouraged universities to take out patents on the results of their government-funded research projects and to try aggressively to commercialize those results. This latter development was accompanied by growing support of the National Institutes of Health for research at universities in the relevant fields, under the expectation that universities would actively engage in patenting of research results and efforts to spur commercialization. These developments strongly reinforced the developing structure that I have described above.

The pharmaceuticals industry has changed in many ways since the times I have just described. However, there would be widespread agreement that these developments set the stage for an era of high productivity of pharmaceuticals research, albeit with apparent diminishing returns in recent years, and for US dominance in commercial biotech, which holds to the present time.

All three of the above accounts are of a piece of the economy, not the whole, although the developments Chandler described had a very widespread impact. I firmly believe that economic growth cannot be understood as an undifferentiated aggregate phenomenon, but rather one needs to understand an economy as consisting of many different sectors, each with its own dynamic.

However, I also believe that there is a lot to Schumpeter's theory, presented in his *Business Cycles* (1939), that the history of economic growth tends to divide up into eras and that within any particular era there is a relatively small set of technologies and indus-

tries that are driving economic growth. Schumpeter's theory clearly involves the coevolution of technology and firm and industry structure. Recently Christopher Freeman and Carlotta Perez (1988) have proposed that the key technologies and industries of different eras generally require different sets of supporting institutions. Their argument is that the nations that tend to be leaders in the different eras are those that had, or managed to build, the appropriate set of institutions.

In the discussion above I have tried to highlight several things. Firstly, once one pays attention to the details, one virtually is forced to take an evolutionary perspective on economic dynamics. A framework that assumes full rational decision-making, and a context of continuing equilibrium, is completely inadequate. Secondly, the stories presented above involve in an essential way the coevolution of technology, firm and industry structures and a variety of non-market institutions. An account limited to the Walrasian actors would miss much of the important action. Third, public policies and programs, including the development of law, are an essential part of the dynamic.

EVOLUTIONARY THEORY AND ECONOMIC DEVELOPMENT

I propose that these same features also are there in the rapid economic development of countries, originally far behind the frontier, which have broadly caught up. Successful development involves the co-evolution of technologies employed, firm and industry structure and broader economic institutions. Government policies and programs are an essential part of the picture; for better or for worse, but inevitably.

For countries aiming to catch up, the basic challenge is to learn to master new ways of doing things. This involves breaking from the circular flow of economic activity that Schumpeter used as his base concept for defining what he meant by innovation. In Schumpeter's sense of the term, catching-up requires innovation. The innovation involved in catching-up is not what economists studying technological advance in countries at the frontier tend to mean by the term. The innovation in catching-up involves bringing in and learning to master ways of doing things that may have been used for some time in the advanced economies of the world, even though they are new for the country or region that is catching up. In most cases there are models in advanced countries that can serve as targets for emulation, and in many cases active assistance is available in developing the new capability. In some cases important aspects of the model can simply be imported.

But bringing into operation practices that are new in the context involves an essential break from Schumpeter's circular flow of customary activity. The record is clear that there is considerable learning that needs to be done to enable the new modes of operation to be got under effective control, and a high chance of failure. These are the hallmarks of innovation, at least in evolutionary economic theory.

Neoclassical growth theory misses all of this. In a recent article Howard Pack and I (Nelson and Pack 1999) argued that neoclassical theory sees economic development as largely driven by accumulation: investments in physical and human capital. In contrast, we argue that the key driving force of catching-up is assimilation: learning to do effectively what countries at the frontier have been doing, often for some time. We recognize, of course, that countries behind the frontier that have made successful progress in closing the gap have been marked by high rates of investment in physical and human

capital. These were needed to bring in the new ways of doing things, but not sufficient. The premise of neoclassical theory is that, if the investments are made, the acquisition and mastery of new ways of doing things is relatively easy, even automatic. The experience of some of the communist economies in the period between 1960 and 1990 shows how wrong this presumption is. High rates of investment, without effective assimilation, inevitably result in low returns to those investments and little in the way of effective development.

In contrast, Pack and I argue that the driving force of successful catching-up is innovation, in the sense described above. Successful innovation requires access to physical and human capital. However, to a considerable extent, innovation and effective learning tend to draw supplies of physical and human capital by enabling their rates of return to be high. Of course, if a country does not have the institutional structure that enables physical and human capital to be drawn to, or created for, promising innovative efforts, innovation will be scotched. But reading the successful histories of catching-up in Japan early in the twentieth century, and Korea and Taiwan toward the close of the twentieth century, it was innovation that was driving the process, proceeding in an environment where supplies of physical and human capital were available and forthcoming if the returns were high.

Much of the standard discussion about what is needed for catching-up focuses on the need for access to and achievement of mastery over modern technologies. I would like to propose that that job today is in some ways easier and in some ways more difficult than it was when Korea and Taiwan were successfully taking aboard modern technologies. It is easier because the body of relatively codified knowledge underlying most important technologies has become much stronger than was the case, say, 30 years ago, and much of that knowledge can be garnered through training, sometimes advanced training, in the relevant sciences and engineering disciplines. The need for technological apprenticeship in, or tutelage by, companies in the leading countries, therefore, has diminished. I am not arguing that a freshly Massachusetts Institute of Technology (MIT)-trained engineer, or a PhD scientist, can step right in and be effective in the operation of a modern technology. However, that training provides a substantial base for learning-by-doing and -using. From this point of view, technological catching-up is easier today than it was 50 years ago.

But from another point of view, it is harder. There is, first of all, greater need for large-scale public and private investments to create a technologically sophisticated cadre of indigenous engineers and applied scientists. While in the early stages of catching-up much of the needed technical sophistication can be gained by sending students to study abroad, as development proceeds and the sheer quantity of needed engineers and scientists increases, a large share of the education is going to have to be undertaken indigenously. I propose that in the current environment, catching-up will be impossible unless a country builds up its education system, from bottom to top. This poses a major challenge both for financing, and for institution-building.

In addition, in today's world, countries seeking to catch up technologically will be operating under a much more restrictive regulatory regime defined by international treaties than was the case earlier. Trade-Related Aspects of Intellectual Property Rights (TRIPS) makes copying, or appearing to copy, much more hazardous in terms of generating lawsuits and diplomatic pressure than used to be the case. And at the same time,

treaties enforced through the World Trade Organization (WTO) significantly narrow the range of government policies of protection and subsidy that can be undertaken in support of infant industry. It is interesting, and I think highly relevant, that these treaties do leave room for support of training and certain kinds of research and development. But to take advantage of this opening poses a major institutional challenge.

Successful catching-up involves much more than simply gaining mastery over new technologies and building up a technologically sophisticated workforce to work with them. Just as new wine seldom goes in old bottles, so the new technologies taken aboard call for new ways of organizing and managing work, and the experience of earlier episodes of successful catching-up indicates that to achieve this involves a painful process of creative destruction. As Japan took aboard more advanced technologies in the early years of the twentieth century, and Korea and Taiwan did in the later years, the economic structures of these countries were transformed. New firms were founded and even whole new industries. Old firms and industries disappeared. One can see the same developments happening in China today.

Achieving the needed reforms in economic structure may well be a more difficult task than gaining the scientific and engineering knowledge needed to operate the new technologies. There are several reasons. One is the political power of old firms and industries and the difficulties they may have in transforming themselves. For comfortable, politically well-connected, old firms, creative destruction is not a welcome thing. Politically and socially, creative destruction is not easy to handle.

Another reason is that the modes of organization and management in successful companies in advanced countries generally are more difficult to imitate, or to transfer, than the technologies that they are using. Unlike the situation regarding technologies where, I have argued, an increasing share of the relevant knowledge has become codified, successful large organizations remain very difficult to understand, much less to imitate. Various pieces of the modern management literature suggest strongly that managers of successful companies may have hazy, or even wrongheaded, notions as to why their own companies are doing well. And various studies have indicated strongly that effective organizational structures and management styles come into existence at least as much through internal evolutionary processes as through conscious planning.

It is interesting that while in recent years there have been a number of empirical studies of the processes through which countries, and firms in countries, have been successful in catching up and have come to master modern technologies, there has been very little detailed study of the process of transformation of firm and industry structure. Clearly a number of different routes have been successfully taken. Korea self-consciously opted for an industry structure involving large, diversified firms. The Taiwanese industrial structure that has been successful in modernization has involved medium-sized firms and continuing new firm entry. Some countries, like Korea, have held off direct foreign investment. Others, like Singapore, have welcomed it. All of these countries, however, seem to have been effective in creating a firm and industry structure that could successfully organize and manage modern technologies. Other countries have been much less successful at this. It would be extremely interesting to learn more about the differences.

Of course the rate and effectiveness of the needed changes in firm and industry structure, as well as the vigor and effectiveness of efforts to adopt and master new technologies, depends on the institutional structures supporting and molding economic activity

and the extent to which they facilitate productive change. Despite the growing influence of the new institutional economics, much of the analysis of development done from a neoclassical perspective continues to see the needed supporting institutional structures as very simple, basically those that support efficient market-organized economic activity as viewed through neoclassical theoretical glasses. Thus there is an emphasis on a well-drawn and well-enforced code of commercial law, strong intellectual property rights, a distancing of government from market economic activity with policies aimed to let the market work, fiscal and monetary policies that support productive investment and avoid inflation, and so on. There may be some talk about the role of government in providing needed infrastructure, particularly in the field of education, but I have seen no coherent discussion of this.

As the examples presented in the preceding section show, the institutional context within which economic growth proceeds in high-income countries is much richer, and more active, than the standard neoclassical picture. This certainly also seems to be the case in the experiences of successful catching-up.

As I indicated earlier, I am using the term 'innovation system' to encompass the wide range of institutions that are involved in supporting and orienting the dynamics of economic activity where innovation is the key driving force. In my discussion above, I have identified a number of institutions that strike me as absolutely key to the catching-up process. The structure of the financial system obviously is pivotal. Since the catching-up process involves a significant shifting of resources away from old firms and industries, the financial system must enable this transfer. And in the present era, the education system is of vital importance. Over the last century, all the countries that have been successful in catching up have had a system of primary and secondary education that endowed a large fraction of the young population with the basic skills needed to operate in a modern technology, and they also provided high-level training for a sufficient cadre of scientists and engineers to enable foreign technologies to be absorbed.

The fact that today so much of technology is science-based means, I believe, that a country's system of advanced training in science, technology and the other bodies of knowledge needed to master modern ways of doing things is going to be even more important in the twenty-first century than it was in the twentieth. And research at universities and public labs is going to play a more important role (for a discussion, see Mazzoleni and Nelson 2007).

While overlooked in much of the writings on economic development, indigenous public sector research has long been an important element of catching-up in certain fields. This is certainly so in agriculture, and here agricultural economists have provided a considerable amount of analysis and evidence. It also would appear to be true regarding medicine, although I have not been able to find much in the way of systematic study here. An important part of the reason in both of these fields is that in these areas developing countries often could not simply copy technology and practice in countries at the frontier, but needed to develop technologies suited to their own conditions. Soil and climate conditions tend to be different. The prevalent diseases were different. There is every reason to believe that the importance of having a capability to do effective research and development in agriculture and medicine will be as important in the future as it has been in the past. In these areas, international institutions have played important roles in the past and will continue to do so in the future. But I suspect strongly that

there are major advantages to a country in building up its own research capabilities in these areas.

In contrast with agriculture and medicine, while in manufacturing the technologies used in advanced countries may not have been optimal, at least they worked in the new setting with often modest modification. And they were generally available. The experience of countries that have successfully caught up in manufacturing over the past half-century testifies to the importance of a nation's university system in providing a supply of trained engineers and applied scientists for manufacturing firms' catching-up. However, while there are interesting exceptions (electronics in Taiwan and aircraft in Brazil are examples), it is not clear that in the past, research per se in universities and national laboratories has played an important role in catching-up in manufacturing, beyond its role in the training function.

I would like to argue that circumstances have changed. There is, first of all, the fact that many important technologies now have a strong science base. As I noted earlier, this at once presents a problem for developing countries, in that they cannot learn to master these technologies unless they have a highly trained workforce, including a cadre of sophisticated scientists and engineers; but it also provides an opportunity, in that a larger share of the needed knowledge is open to those who have the capacity to keep up with it. In many of the relevant fields, an important part of the activity of keeping up with developments in a technology involves an active research program. Universities and public laboratories are appropriate places for this kind of research, if these institutions also provide training and experience for scientists and engineers who will go out into industry. Earlier I also noted both the new international regimes' stronger protection of intellectual property and the apparent leeway under WTO rules for certain kinds of public research. There is no question in my mind that for countries aiming to catch up, developing the capabilities for learning and innovation in firms is the heart of the challenge. However, a strong system of university and public labs research can play a very important supporting role.

THE CASE FOR AN EVOLUTIONARY THEORY OF ECONOMIC CATCHING-UP

I want to conclude this chapter by reflecting briefly on the role of theory in economic analysis and the case for an evolutionary economic theory. I propose that theory in economics exists at several different levels of abstraction. Sidney Winter and I (Nelson and Winter 1982) have highlighted the difference between what we called 'appreciative' and 'formal' theory, with the former mostly expressed verbally, and much closer to the empirical details of the subject matter than the latter; and the latter articulated more abstractly, often in the form of a mathematical model, and as more amenable to logical exploration and manipulation. While current use of the term 'theory' in economics has tended to identify with formal theory, we argued that in economics most of the empirical research and interpretation of empirical phenomena was structured by appreciative theory.

Modern economists tend to be pragmatic and flexible when they are doing empirical research and engaging in serious policy discussion, or at least the best of them are.

Does this mean that it really does not matter whether the theory articulated and taught as formal theory is neoclassical or evolutionary? I think it does matter. In the first place, while empirically oriented economists can partially escape the grip of neoclassical theory in the research and analysis they do, holding that theory still makes it difficult to appreciate the nature and role of innovation in economic activity, as various attempts to force innovation into a maximizing framework attest. It makes it difficult to recognize adequately that analyzing the behavior and performance of economic actors in a hypothetical equilibrium is not a good way to understand what is going on in contexts that clearly are out of equilibrium and in flux. In contrast, the perspective of modern evolutionary theory provides a framework that is helpful in the analysis of economic dynamics.

Secondly, the theory one holds influences the empirical literature with which one is familiar. Scholars who hold strongly to neoclassical theory *qua* theory tend not to know about the extensive empirical literature on economic dynamics that has been the work of evolutionary economists and which is published in journals and other outlets that draw in articles by economists who do not adhere to neoclassical theory. I am struck, for example, that my neoclassical colleagues who write about technological advance as the driving force behind economic growth tend not to be aware of *Research Policy* or *Industrial and Corporate Change* or the *Journal of Evolutionary Economics*, where, in my view, much of the most interesting empirical work on firm and industry dynamics is being published. (A good case in point is Rodrik 2007.)

It is apparent that a growing number of young economists interested in economic development are finding in evolutionary economics a much more useful way of understanding the economic development process. This is reflected in the growth of the Global Network for Economics of Learning, Innovation, and Competence Building Systems (Globelics). The new journal *Innovation and Development* will provide a valuable new outlet for research oriented by this perspective.

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19. Classical development economists of the mid-twentieth century

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INTRODUCTION

‘I do not know’, Alexis de Tocqueville says in *Democracy in America* (1876), ‘if one can cite a single manufacturing and commercial nation – from the Tyrants to the Florentine and the English, – that has not also been free. Therefore a close tie and a necessary relation exists between those two things: freedom and industry.’ Tocqueville expresses what could be called a development truism of half a thousand years from late Renaissance city-states to the Marshall Plan and the Havana Charter. Indeed, during the Enlightenment, civilization and democracy were understood, through the analysis of people like Montesquieu and Voltaire among many others, as products of a specific type of economic structure. When German economist Johan Jacob Meyen stated in 1770 that ‘it is known that a primitive people does not improve their customs and institutions later to find useful industries, but the other way around’, he expressed something which could be considered common sense at the time. We find the same idea – that civilization is created by industrialization or, to put it more specifically, by the presence of increasing returns activities – in the nineteenth century in thinkers across the whole political spectrum from Abraham Lincoln to Karl Marx. Industrialization ‘draws all, even the most barbarian, nations into civilization’, as Marx puts it. What might be called the historical development consensus saw, in other words, the aim of development in the creation of middle-income economies, with all the accompanying values and culture that in turn were perceived as highly conducive to further sustained development. However, as Figure 19.1 shows, the creation of middle-income economies has become a true rarity in the last three decades.

Apart from East Asia’s much-praised experience and the enormous catching-up taking place in China and, to a lesser degree, in India, the rest of the developing world from Eastern Europe to Latin America and Africa is experiencing strong cognitive dissonance.

While many of these countries have seen significant growth in exports and in foreign capital inflows, their income levels have flatlined since 1980 and in most cases actually dropped in the 1990s. In fact, compared to highly developed countries, most developing countries were on a steady track towards catching up until the early 1980s; the subsequent decades show continuous and significant catching-up – and actual surging-ahead in the case of some countries such as Singapore – of East Asian economies (see also Wade 2008). The trends follow rather precisely the changes in development thinking from classical development economics up to the late 1970s to the Washington Consensus from the 1980s.

Moreover, as Figure 19.2 shows, in recent decades, most developing regions – again

* An early version of this chapter is Kattel et al. (2009).

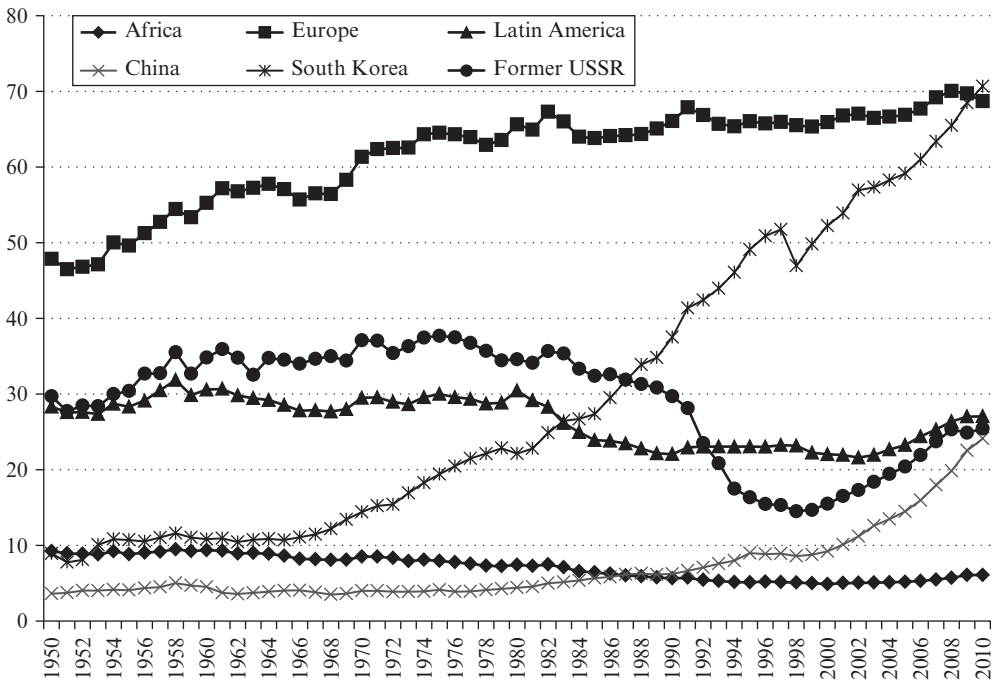


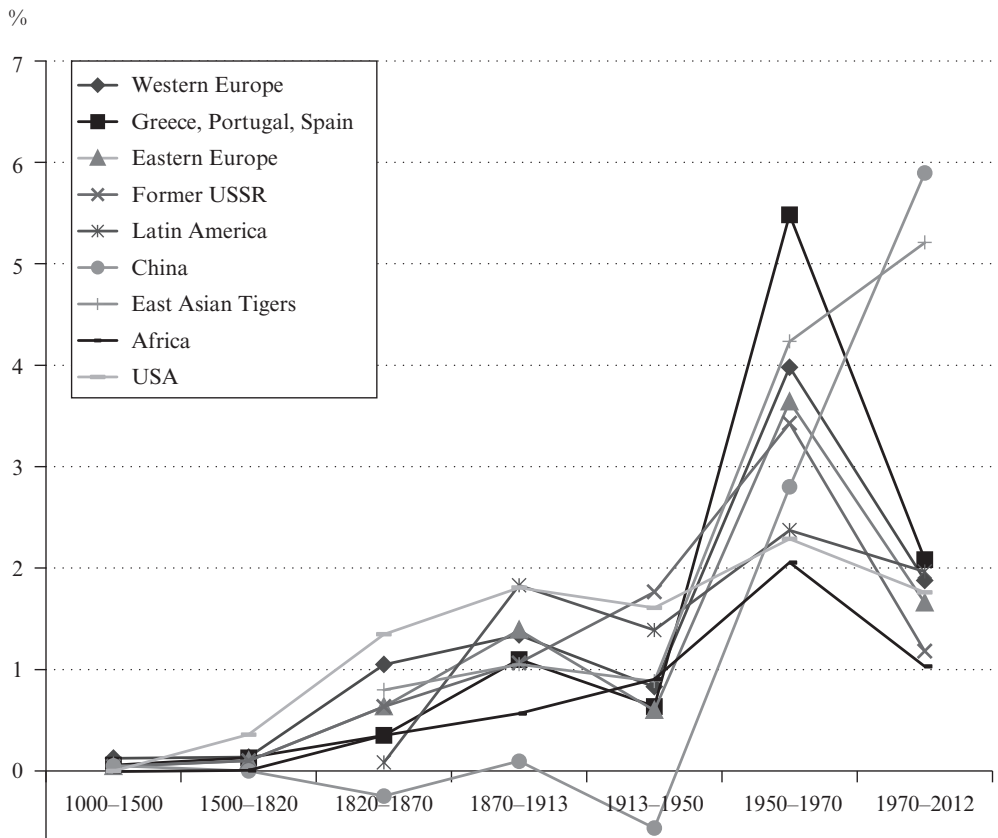
Figure 19.1 GDP per capita as a % of US GDP per capita, 1950-2010, regional simple averages, in 1990 GK\$

with the exception of East Asia – experienced growth rates that go clearly against the more or less positive trend of the last 200 years from a long-term historical perspective. In other words, the world after the industrial revolution has not seen such a dismal development performance. The Washington Consensus in development mainstream seems to be a failure on an unprecedented scale.

Yet, surprisingly, the decades after 1980 have been called the best development decades in a generation (Rodrik 2007, 13–14; Skidelsky 2008).¹ While Amsden (2007, 2) argues, in contrast, that during these same decades, for most developing countries, ‘Heaven slowly gave way to Hell’, even the most ardent supporters of the Washington Consensus are forced to admit that there is something similar to the ‘China price’ in the development statistics of the poorer countries from 1980 onward. If one deducts China’s and India’s growth from the developing countries’ data, there is not much as far as growth and development in the rest of the developing world is concerned. And neither China nor India can be counted as showcases of the neoliberal policies propagated by the Washington Consensus. We will return to this later.

As the World Bank itself admits, the rest of the developing countries, notably in Africa, Latin America and some of the former Soviet republics (in Central Asia, Moldova,

¹ To be precise, Rodrik and Skidelsky, similarly to many others, mean mostly poverty reduction in this context.



Source: Calculations based on the Conference Board Total Economy Database, <http://www.conference-board.org/data/economydatabase/>.

Figure 19.2 Growth rate of GDP per capita of selected world regions; regional average in selected periods between 1820 and 2001; annual average compound growth rate

Ukraine), suffer from heavy doses of a cognitive dissonance between promised growth and the reality of standing still, if they are lucky, or dropping backwards to income levels of earlier decades: 'Whereas Latin America's income per head grew by 10 per cent in the entire 25 years from 1980 to 2005, it grew by 82 per cent in the 20 years from 1960 to 1980' (Amsden 2007, 6; also World Bank 2006).

Latin America diligently followed policy reform suggestions, yet failed to grow, as the World Bank also admits (World Bank 2006, 36–29); Eastern Europe and the former Soviet Union were equally willing to apply the policy reforms and again, according to the World Bank's calculations, the recession these countries saw in the 1990s and which many are still experiencing is worse than the Great Depression in the United States of America (USA) and World War II in Western Europe (in both cases, the countries affected recovered considerably quicker). In fact, for example, 'even if Ukraine managed to grow

steadily at 5 per cent a year, starting in 2002, it would take until 2017 to regain its previous peak – implying a transformational recession of more than a quarter of a century at best’ (World Bank 2006, 33). Indeed, also for most Eastern European countries, the recession was severe and lasted at least ten years (Reinert and Kattel 2007; Tiits et al. 2008).

Coupled with the change of techno-economic paradigm that completely changed the nature of industrialization (outsourcing) and essentially stripped many maturing and increasingly footloose industrial activities of significant (dynamic) scale economies, Washington Consensus policies emphasizing foreign direct investment (FDI)-led growth have created a truly toxic situation for many developing countries where the liability destruction initially was strong and quick but was followed by slow asset creation. Thus, ‘the failure of the Consensus reform policies lies in the fact that they provided support for the “destruction” of inefficient domestic industry, but failed to provide support for the “creative” phase of “creative destruction” of a real transformation of the productive structure through higher investment and technological innovation’ (Kregel 2008). We will return to this topic, as well. However, it seems rather obvious that the development community has unlearned how to create middle-income countries.

Yet, there is growing concern and evidence that the current form of globalization not only hurts developing countries that have followed the Washington Consensus policies, but is also harmful to the developed North. The flipside of the unlearning that has taken place in the development community seems to be that we are unlearning how to create middle-class jobs in the developed core countries. For all intents and purposes, non-existing growth in real wages in the USA and Germany over the first decade of this century has given ample reasons to start considering the impact of Washington Consensus trade policies on these countries, the most prominent examples being Samuelson’s (2004) and Krugman’s (2008) accounts. In 2004, Samuelson argued that continuing globalization and economic integration of world markets in its present form would do permanent harm to high-wage jobs in highly developed countries like the US. In early 2008, Krugman, another celebrity mainstream economist, argued that increased trade between US and developing countries was factually hurting US wages and middle-class jobs and thus increased income inequality. He went on to prove this not only with US data but also with elaborate modelling.

What Krugman does not realize, or at any rate does not say so explicitly, is that the problem lies not in the structure or policies of the US economy or even in the growing trade as such, but in the nature of specialization of developing-country exports. Specializing in lower-end production or services – also in sectors like information and communication technology (ICT) – virtually traps developing countries in low-wage jobs and, at the same time, lures the high-wage middle-class jobs away from the developed nations. Thus, while the global production grows, not all countries necessarily benefit from it. And, consequently, ‘firms maximize global output but do not necessarily maximize national income’ (Palley 2006, 16).

In this chapter we aim to show, first, how classical development economics, that of Ragnar Nurkse’s (1907–1957) generation, epitomized the best development practices of the past 500 years and crafted them into what Krugman (1994) rightly calls high development theory. It is not a coincidence that the post-World War II era, when Nurkse and others ruled the development mainstream, is one of exceptionally good performance for many poor countries. Second, we argue that the alleged death of classical development

economics and the subsequent rise of the Washington Consensus has to do not so much with increasing modelling in economics, a way of research purposely discarded by many classical development thinkers, as Krugman (1994) claims, but much more with misunderstanding the reasons for East Asia's success and Latin America's demise; we show that the root cause of this misunderstanding – which in fact goes back to 'misreading' key passages in Adam Smith – is the role of technology, or of increasing returns activities, and of finance, in development.

CLASSICAL DEVELOPMENT ECONOMICS

Pre-Smithian economics saw development as a goal created by increasing returns and innovations in manufacturing and not in agriculture, where stagnant productivity, diminishing returns and monoculture, as well as the absence of synergies, prevented growth.² There are a number of basic principles of development that can be observed in action from fifteenth-century Tudor England to the Marshall Plan. Despite all the theoretical and historical diversity that makes up this tradition of more than 500 years, one very simple formula sums it up rather effectively: a nation is better off with an inefficient industrial (increasing returns) sector than with none at all. Yet, part of this consensus is also the understanding that possessing an industrial sector, however inefficient, should be followed by increased trade in order to create competitive pressure for the industrial sector.

Classical development economics, while in itself a highly diverse group of economic and policy ideas as well as economists, is perhaps still the best-articulated and theoretically grounded expression of the above-described development consensus. And, as Krugman (1994) argues, the 'irony is that we can now see that high development theory made perfectly good sense after all'.

The group of economists commonly referred to as classical development economists, or pioneers of development or of high development theory, is typically seen to consist of four to six key thinkers: Paul Rosenstein-Rodan, Hans Singer, Arthur Lewis, Albert Hirschman, Gunnar Myrdal and Ragnar Nurkse.³ While of this group, Nurkse's contribution is the strongest in terms of economic theory, Hirschman's accomplishments are perhaps the most far-reaching in terms of influencing mainstream social science and development.⁴ Today, it is relatively typical to find accounts that juxtapose precisely these two thinkers as representing almost exactly opposing ideas about development, namely, balanced versus unbalanced growth. However, as Hirschman later acknowledged, the differences between him and Nurkse were minor at the end of the day, and, in large part,

² For detailed discussions, see Chapter 2 in this volume by S. Reinert on mercantilism, and Chapter 3 by E. Reinert and P. Rössner on cameralism.

³ There are a number of other thinkers who played key roles in early development theory and could be mentioned here as well, for instance Raul Prebisch and W.W. Rostow. A good collection of recollections by the key figures in this tradition is gathered in Meier and Seers (1984) (although this does not include Nurkse, as he had passed away by the time of this publication). On Latin American structuralism, see Cimoli and Porcile, Chapter 11 in this volume.

⁴ On Hirschman, see Alacevich, Chapter 24 in this volume.

they shared a very similar outlook (Hirschman 1984; see also Nurkse 2009, 329ff).⁵ In what follows, we base our brief account mostly on Nurkse's ideas,⁶ adding bits and pieces from the other pioneers, mostly from Rosenstein-Rodan and Hirschman.

The high development theory developed by Nurkse and others rests on two key ideas: (1) financing for development has to come to a large extent from the developing country itself ('Capital is made at home'; Nurkse 1953, 141); and (2) the key areas to be financed need to exhibit increasing returns in order to trigger dynamics of development or, as Myrdal (1957) argued, virtuous circles of growth.⁷

What makes Nurkse's contribution so important is the fact that he is the only thinker from this group to incorporate both key ideas into a coherent theory of development, and draw clear relationships between these notions.⁸ Indeed, this is precisely the reason Nurkse favoured the balanced growth approach over the unbalanced one (the difference, simply put, being whether one industrializes in numerous areas or just a few key areas first): the former was deemed financially more stable than the latter by Nurkse (2009, 329ff).

According to Nurkse, the financing for development has to come mainly from within the country set on development, because financing of growth through either foreign investments or increased trade was largely a historically unique phenomenon confined to the nineteenth century and, more specifically, to the American (that is, United States) experience (see, e.g., Nurkse 2009, 249–250; 397–401). The 'new countries' within and without the British Empire were 'high income countries from the start: effective markets as well as efficient producers' (ibid. 330). Nurkse thought that it would be nearly impossible for any developing country to repeat such a successful trade- and foreign financing-based growth strategy because America was highly rich in resources, but at the same time populated by a workforce essentially on the same skill level as Britain (ibid. 255). This unique combination made the American experience non-replicable because, in any other circumstance, trade and foreign investment would engender a number of obstacles to development: first, large parts of such financing would seek to utilize poor countries' resources and eventually lock these countries into undiversified economies with a skewed social structure (Nurkse 2009, 246, 251, 255–256); and second, there is a clear danger that significant amounts of foreign financing would end up funding private consumption patterns emulating Western living standards and thus creating balance-of-payments problems (Nurkse 1953, 66–70).

To sum up, a growth strategy simply based on trade and foreign financing would leave the poor countries with negative financial flows and an undiversified production structure – just like the Washington Consensus-based policies have done – and this amounts to financial fragility or to a Ponzi financing position. The problem with such a

⁵ Alacevich (2011) offers a nuanced discussion of the differences between the two camps, and also comes to the conclusion that what these two strands of development theorists shared was significantly larger than what they disagreed upon.

⁶ While Nurkse (2009) is a collection of his various main works, we refer to this publication as a whole. Further, the 2009 collection also includes Nurkse's 1953 book *Problems of Capital in Underdeveloped Countries*, but we will refer hereafter to the original 1953 edition as this is the best-known work by Nurkse.

⁷ For Nurkse, key passages are Nurkse (1953, 19–25).

⁸ Krugman (1994), for instances, discusses only the aspect of increasing returns and fails to note how this is related to financial issues.

strategy is that it relies on foreign financing to balance the current account, and this can take place only under very specific conditions:

it is only possible to maintain a development strategy based on net imports financed by foreign capital inflows if the interest rates on the foreign borrowing are equal to the rate of increase of foreign borrowing. If interest rates are higher than the rate of increase of inflows . . . the policy will eventually and automatically become self-reversing as the current account becomes dominated by interest and profit remittances that exceed capital inflows. (Kregel 2004, 11)

This, arguably, is what has made various growth efforts in developing countries so difficult to sustain in the last few development decades: many growth strategies are simply based on a self-reversing logic, and this is indeed what Nurkse clearly foresaw.

Thus, according to Nurkse, any economic strategy that wants to be sustainable in the long term has to come up with another way of financing the development. What this means, however, is that such a development strategy has to work in a relatively confined environment in terms of capital and skills. Taking into account the financial constraints described above, it is in this context that Nurkse interprets Adam Smith's famous theorem about the size of the market being limited by the division of labour. For Nurkse (1953, 21–25), following Allyn Young's 1928 essay, this theorem indicates that the size of the market is limited by real wages that are, in turn, limited by productivity growth. For Nurkse (1953, 8, 14; 2009, 3–6), and very clearly for Hirschman (1984) and Rosenstein-Rodan (1984), productivity growth is determined by the presence of increasing returns in an economy. Thus, a viable development strategy should aim at establishing a number of increasing returns activities that would become each other's customers and generate the first virtuous circle of growth. The size of the market is limited by the number of increasing returns activities present at the particular market. This dynamics is the essence of Nurkse's balanced growth, but also of Rosenstein-Rodan's big push and, in the end, also of Hirschman's unbalanced growth, expressed in very similar wording:

The expansion of the market can be realized only through a process of balanced growth, where people in different industries, working with more and better tools, become each other's customers. (Nurkse archives, Box 8; see also Nurkse 2009, 337–338)

new producers will be each other's customers, and the complementarity of demand will reduce the risk of not finding a market. Risk reduction is in this sense a special case of external economies. (Rosenstein-Rodan 1984, 213)

Hirschman argues that such an interrelatedness – which he called backward and forward linkages – does not happen simultaneously, but rather in a sequential process of learning and development, and that in this process the role of public policy or development strategy in setting goals and advancing specific sectors is key.⁹ Nurkse's most serious argument against this is that such unbalanced growth will very probably need to rely on foreign financing at some point, as Hirschman (1984, 103) also admits. As we have argued above, due to the specific nature of such foreign financing (extractive in its nature

⁹ Hirschman discusses his relationship to Nurkse and Rosenstein-Rodan most explicitly in Hirschman (1984, esp. 96–97).

and easily engendering lock-in effects, plus financing the consumption of imported goods), Nurkse (2009, 247–253) was wary that such a strategy would lead to financial fragility. As we have argued above, this proved to be a highly far-sighted concern.

It is important to note that most subsequent accounts of big-push and balanced-growth theories only emphasize the idea of consorted investments, mostly missing the point that, first, these policy efforts should target increasing returns activities; and second, the reasoning behind this has to do with financial stability (see, e.g., Easterly 2008).

In order to create increasing returns activities, infant-industry protection may be necessary according to Nurkse and others, but it is also more important here to realize that the argument is less about protection but more about what is specifically targeted with the protective policies and how: infant creation is more important than infant protection (Nurkse 2009, 334; 1953, 104–105, 109). Indeed, perhaps the key idea behind targeting increasing returns activities is that the resulting virtuous circles of growth (productivity and wage growth) act as barriers of entry for competitors both in terms of private companies and also in terms of regions and countries (see also Reinert 1980; Gomory and Baumol 2004). The reason is evident in the very logic of balanced growth: virtuous circles of growth relay and create their own demand and financing (Nurkse 2009, 296). Thus, the driving idea behind Nurkse's balanced growth is not simply a set of reasons and/or policies for the creation of diversity in increasing returns activities, but moreover to show that both as a theoretical foundation and as a policy strategy, balanced growth is coherent and sustainable as it shows how long-term growth with financial stability can be achieved and maintained. In sum, Nurkse's balanced growth shows how middle-income nations can be created.

The quest to create middle-income economies as the main goal of development can also be stated differently: how to upgrade developing countries' economic structures with rising wages and without beggar-thy-neighbour types of policies, for instance in foreign exchange rates, labour markets, tax rates and so forth (see also Summers 2008). This, however, is largely the way in which competitiveness has come to be defined by international organizations such as the Organisation for Economic Co-operation and Development (OECD) and the European Union. Interestingly, however, this definition of competitiveness comes from a 1985 Reagan administration report, *Global Competition: The New Reality* by the President's Commission on Industrial Competitiveness (1985; see Scott and Lodge 1985 as background). Historically, however, this goes back further to the Bretton Woods agreements, in particular the one that established the International Monetary Fund (IMF), where under Article I.2 it states the aim of the IMF as follows: 'To facilitate the expansion and balanced growth of international trade, and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.' The key background publication for these ideas was the League of Nations publication from 1944 titled *International Currency Experience: Lessons of the Inter-war Period*, mainly written by Nurkse (see further, Urban 2009). This not only shows the breadth of Nurkse's influence, but also shows why his and his generation's development ideas are so relevant today: the strategy proposed by classical development economists is, first, based on a historically proven recipe of targeting increasing returns activities; and second, doing so under more or less financially stable conditions. It also shows, however, that following the path of balanced growth makes it clear that there is a

need for global balancing rules as well. While the post-World War II era showed that this can indeed be done, the crisis starting in 2008 has taught that such global financial rules are in dire need again.

Krugman (1994) argues that the decline of high development theory has methodological reasons: 'so why didn't high development theory get expressed in formal models? Almost certainly for one basic reason: high development theory rested critically on the assumption of economies of scale, but nobody knew how to put these scale economies into formal models.' Krugman admits that Hirschman and Myrdal in particular were consciously against increasing modelling in economics. His own argument that modelling is inevitable in economics is based on two simplifying assumptions: first, science is based on models; and second, models need to be mathematical. While both assumptions are, to say the least, debatable (see, in particular, Drechsler (2004) for an excellent discussion), putting the blame on the doorstep of high development theory, Krugman, along with much of the economics profession, completely misses the other side of the story: how model-based economics interpreted post-World War II development stories. As we will argue below, because model-based economics assumed increasing returns and technology from development, it was left with tools Nurkse and others deemed counterproductive when used without targeting precisely the increasing returns activities, trade openness and foreign financing as the main engines of growth. As the saying goes, if all you have is a hammer, pretty soon all problems look like nails. This is precisely what happened. While high development theory argued for a context-specific approach and tailor-made policies – because economic activities, technology, knowledge and economies of scale change enormously in time and space – the new development consensus on the rise in the 1980s and in full sway to this day argues the opposite: all development problems are fundamentally alike, and thus, solving them should go by more or less the same policy prescriptions. The success of such an approach lies in the very nature of development: as Hirschman argues, all development presupposes some form of priority-setting through policy-making (Hirschman 1958). The Washington Consensus did away with exactly this assumption: since all development problems are assumed to be of the same nature, the solutions are bound to be the same as well, and this takes the burden of proof, so to say, away from domestic policy-making.

WASHINGTON FOLLIES

It has been more or less 30 years since the alleged death of classical development economics. The 'demise' was precipitated by the onslaught of 'The Age of Milton Friedman',¹⁰ and by what about 20 years ago became more widely known as the Washington Consensus.¹¹ It can be argued that it was truly an intellectual 'counter-revolution', a term used both by the supporters and the critics (see Johnson 1971 and Klein 2007, respectively). The counter-revolution, whatever its ideological core or its public enemies may originally have

¹⁰ Shleifer (2008); see Galbraith (2008) from the opposite perspective.

¹¹ The classic reference is Williamson (2002) summarizing 'what Washington means by policy reform', originally published in 1990; see also Williamson (2008).

been (be it development economics proper, Keynesianism or ‘bastard Keynesianism’),¹² was at its core aimed at juxtaposing two seemingly different development traditions: East Asia’s rise and Latin America’s doom in the 1970s and 1980s. However, this was only possible by showing, first, that East Asia’s rise was based on using policies based on classical Ricardian comparative advantage thinking and using exports as an ‘engine of growth’ (see, e.g., Balassa 1971; Rodrik 2006; World Bank 2008); and, second, that Latin America’s problems had its roots in failed or at least mismanaged import substitution industrialization, closely related with the classical development economics (see, e.g., Bhagwati 1984; Rodrik 2007). In both cases, the counter-revolutionaries or their descendants got it wrong: exports were only a part of the success story in East Asia’s rapid rise, and import substitution played only a relatively insignificant part in Latin America’s fall.

East Asia’s story was told as if feedback linkages and positive externalities emerging in these economies through state-led industrialization played only an exogenous role in development.¹³ That is, technology and innovation were simply left out of the story, and a rather simplistic conclusion was drawn: export-led growth is what works in development countries. Latin America’s problems, in turn, were seen through a double prism of inflation and rent-seeking, without however realizing that increasing foreign private lending in the 1970s also spurred the consumption engine into higher gear, which was bound to lead to the current account problems (through import consumption) and eventually towards long-lasting financial fragility that undermined industrialization efforts, and not the other way around (Kregel 2008). That is, the role of the post-Bretton Woods international financial architecture was ignored and, in fact, together with the newly learned ‘lessons’ from East Asia about export-led growth, it was precisely the accelerating financial liberalization that was seen as the main source of the much-needed capital for the export-led growth model.¹⁴ Two plus two equals five: development needs foreign investments and exports, and both could be provided by a stable macroeconomic environment and liberalized markets. In sum, two misinterpretations ended up providing a new model for development that evolved into the Washington Consensus as a full-fledged ideology and set of policies.

Significantly, both misinterpretations marked a break with a long-standing development tradition reaching back to the Renaissance (see Reinert 2007 in detail) – that was, however, also supported by many if not most neoclassical economists at the time (an excellent summary is Evans and Alizadeh 1984) – namely, that infant industry protection is a necessary if not sufficient condition for industrialization and diversification. Also Williamson’s (2002) original list of Washington Consensus policies included infant-industry protection, and ‘a moderate general tariff (in the range of 10 per cent to 20 per cent, with little dispersion) [that] might be accepted as a mechanism to provide a bias toward diversifying the industrial base without threatening serious costs’. Neither made it into the Washington Consensus practices in the 1990s or into its augmented version of the 2000s.¹⁵

¹² For accounts from rather different perspectives, see Toye (1987) and Klein (2007).

¹³ Wade (2004) is an excellent overview.

¹⁴ Blecker (2000) provides an overview of export-led growth strategies.

¹⁵ A useful discussion of international agreements and industrial policy space is Rodrik (2007, 129–148). For the ‘Augmented Washington Consensus’, see Rodrik (2006).

With these misinterpretations, however, not only were real developments misunderstood, but it is equally important to note that comparing East Asian and Latin American development experiences yields key lessons about the success and failure of development strategies. More precisely, perhaps the key lesson is that there are different kinds of protectionism. If development history teaches us that infant-industry protection is a *conditio sine qua non*, then it is exactly the comparison of two very recent instances of this strategy that can teach us the reasons for success and failure. Indeed, based on these two historical experiences, we can create two 'ideal types' of protectionism. In Table 19.1, we try to distil from vast and diverse historical data and different contexts two such 'ideal types'.

Comparing the two, it is clear that key differences between these 'ideal types' rest precisely in the issues that especially Nurkse, but also other early development economists, thought fundamental to development. First is the idea that development needs specific economic activities that exhibit long-term potential in terms of learning curves, home-market expansion and exports. Such activities provide dynamic increasing returns that in turn create possibilities for continuous upgrading through educational, labour-market

Table 19.1 Ideal types of protectionism compared

East Asian	Latin American
Temporary protection of new industries/products for the world market	Permanent protection of mature industries/products for the home market (often very small)
Very steep learning curves compared to the rest of the world	Learning that lags behind the rest of the world
Based on a dynamic Schumpeterian view of the world – market-driven 'creative destruction'	Based on a more static view of the world – planned economy
Domestic competition maintained	Little domestic competition
Core technology locally controlled	Core technology generally imported from abroad/assembly of imported parts/ 'superficial' Industrialization
Massive investment in education/industrial policy created a huge demand for education. Supply of educated people matched demand from Industry.	Less emphasis on education/type of industries created did not lead to huge (East Asian) demand for education. Investment in education therefore tends to feed emigration
<i>Meritocracy</i> - capital, jobs and privileges distributed according to qualifications	<i>Nepotism</i> in the distribution of capital, jobs and privileges
Equality of land distribution (Korea)	Mixed record on land distribution
Even income distribution increased home market for advanced industrial goods	Uneven income distribution restricted scale of home market and decreased competitiveness of local Industry
Profits created through dynamic 'Schumpeterian' rent-seeking	Profits created through static rent-seeking
Intense cooperation between producers and local suppliers	Confrontation between producers and local suppliers
Regulation of technology transfer oriented towards maximizing knowledge transferred	Regulation of technology transfer oriented towards avoiding 'traps'

and other policies. This is what East Asian countries did; Latin American countries failed to target windows of opportunities in different activities, and a need for competitive pressure was underestimated. Second is the failure to create dynamic economies of scale, which led to financial fragility relatively easily, in particular when foreign capital inflows and lending became prevalent elements in the development strategy, as happened in Latin America in the 1980s.

These lessons, however, were almost completely missed by the Washington Consensus.¹⁶ Moreover, what is historically significant is the fact that the classical development economists were largely made the culprits of Latin America's problems. This is all the more puzzling when one reads the original works of these authors and looks at the subsequent history; it becomes clear, as we have shown above, that their theories predicted both East Asia's rise (understanding the key role of technology and diversity) and Latin America's doom (understanding financial fragility built into foreign-financing-led growth strategies). Interestingly, Williamson's article on the Washington Consensus ends with doubt and a premonition along similar lines of thought:

A striking fact about the list of policies on which Washington does have a collective view is that they all stem from classical mainstream economic theory, at least if one is allowed to count Keynes as a classic by now. None of the ideas spawned by the development literature – such as the big push, balanced or unbalanced growth, surplus labor, or even the two-gap model – plays any essential role in motivating the Washington consensus . . . This raises the question as to whether Washington is correct in its implicit dismissal of the development literature as a diversion from the harsh realities of the dismal science. Or is the Washington consensus, or my interpretation of it, missing something? (Williamson 2002)

As we have seen in Figures 19.1 and 19.2, Washington Consensus policies not only failed to deliver growth and development to most developing countries, but following such policies even seems to have been almost a blueprint for falling back rather than catching up. It is ironic, however, but also deeply significant, that in its core the Washington Consensus goes back to a misreading of Adam Smith. We use here the term 'misreading' in a rather specific way. This term was coined in the late 1960s by Harold Bloom and denotes a process where authors creatively appropriate phrases and ideas from other authors, in their writing process, and mould them into something new, or at any rate something different. Bloom (1997, 5), writing about theory of poetry, writes 'Poetic history . . . is . . . indistinguishable from poetic influence, since strong poets make that history by misreading one another, so as to clear imaginative space for themselves.' A misreading does not thus connote a negative meaning. Generalizing it into a hermeneutical principle, we can argue that a misreading is the way most theoretical works are read and written. We argue that the history of economic thought has one such key passage, namely Smith's above-mentioned theorem about the size of the market and the division of labour. The impor-

¹⁶ It is interesting that China's development strategies over the last few decades exhibit the results of this skewed learning process in the international development mainstream: while in the 1980s China seemed to be on the path towards the East Asian type of capitalism, where a mix of competitive markets and technology targeting is a key element, China then, reflecting the rise of the Washington Consensus in the 1990s, switched to an export-led growth strategy that, however, also exhibits certain elements of the Latin American type of development: nepotism and static rent-seeking in the policy environment, and uneven income distribution. For an intriguing study of Chinese capitalism, see Huang (2008).

tance of the theorem can be easily understood from the famous example Smith himself uses, namely, that of 'the trade of the pin-maker'. According to Smith (1976 [1776], 1.1.3), this particular occupation has gone through a transformation from a one-man business into at least 18 distinct operations performed by different individuals, causing productivity per employee to increase from one pin a day to 4800 pins a day. Such productivity explosions that follow innovations depend, as Smith rightly argued, on extensive trade and, as Smith also admitted, rapid technological development. While most researchers in economics and in related fields agree with the broad-brush description given by Smith, there are strongly varying misreadings about what causes and stimulates such innovations in the private sector. There are essentially two opposing schools of thought. On the one hand, there are scholars in the Schumpeterian/evolutionary/institutionalist¹⁷ tradition who argue that innovations and economic growth in general take place because of knowledge and skill agglomeration and continuous upgrading and technological change, which are engendered by highly embedded policy-making of increasing coordination, dialogue and cooperation managed by a highly capable state and administration.¹⁸ On the other hand, there are scholars in neoclassical and public-choice traditions who argue that the main driver behind innovations and growth are trade and competition: the former using the comparative advantage of nations to bring more, better and cheaper goods to consumers (higher efficiency); the latter creating pressures for companies to incessantly innovate and outcompete the competitors, and to push prices downwards in the process (higher efficiency, again).¹⁹ While the differences in details are, of course, greater than described here, it is important to see that both traditions can be traced back to Adam Smith's (1976 [1776]) theorem that the division of labour is limited by the size of the market. The difference is how one understands the theorem: the former school takes it to mean that the division of labour is key (creation of knowledge and technological diversity, and the producer with his capabilities, are the main policy goals), the latter school thinks the size of the market is key (the extent of trade and competition, and lower prices for consumers, are the main policy goals).

If, instead of accepting Adam Smith as an icon of free trade and laissez-faire under any circumstances, one reads what he says about economic development at an early stage, one will find that he is very much in line with classical development economics, where industrialization is the key recommendation. In his early work, *The Theory of Moral Sentiments*, Adam Smith (1810 [1759]) argued passionately for 'the great system of government', which is helped by adding new manufactures. Interestingly, Smith argued that new manufactures are to be promoted neither to help suppliers nor to help consumers, but in order to improve this 'great system of government'.

In fact, it is possible to argue that Adam Smith was also a misunderstood mercantilist, someone who firmly supported the mercantilist policies of the past, but then argued that they were no longer necessary for England. He praises the Navigation Acts protecting English manufacturing and shipping against Holland, arguing that 'they are as wise . . .

¹⁷ See contributions in this volume by Nelson (Chapter 18) and Lundvall (Chapter 31).

¹⁸ On the role of the state and institutions in economic growth, see for example Evans and Rauch (1999), Wade (2004) and Amsden (1989).

¹⁹ The most recent summary of such arguments is Rodrik (2007). For public choice, see most recently Buchanan and Yoon (2008).

as if they had all been dictated by the most deliberate wisdom' and holding them to be 'perhaps the wisest of all the commercial regulations of England' (Smith 1976 [1776]: I, 486–487). All in all, Smith described a development that had become successfully self-sustained, a kind of snowballing effect, originating in the wise protectionist measures of the past. Only once did Smith (1976, [1776] 477) use the term 'invisible hand' in the *Wealth of Nations*: when it sustained the key import substitution goal of mercantilist policies, when the consumer preferred domestic industry to foreign industry. This is when 'the market' had taken over the role previously played by protective measures, and national manufacturing no longer needed such protection. If one cared to look, Adam Smith also argued for tariff protection at an early stage as a mandatory passage point to development, as did Friedrich List. Studying economic policy without discussing the context is one of the destructive vices of economic practice.

The key is not which side one chooses, however, but to see that both approaches are not simply complementary to each other, but rather should be seen as following each other in a step-by-step development. This, indeed, is perhaps the greatest legacy of early development economists and Ragnar Nurkse: having synthesized these two broad theoretical schools into a coherent theoretical framework that proved highly successful once applied in real life.

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20. Development and *régulation* theory

Robert Boyer

INTRODUCTION

Development theory was born in order to explain the contrast between the rapid growth of the industrialized countries after the 1950s and the absence of significant catch-up of the so-called periphery. In a sense it was built as the exception to the then dominant neoclassical growth theory that assumed perfect market adjustments of an industrialized economy. This epoch is now over, under the pressure of at least three converging factors.

First of all, after having tried many theories and strategies, many governments had adopted a ‘Washington Consensus’ in the 1990s that promoted the full implementation of market mechanisms for product, labor and finance. The succession of Latin American and Asian crises and finally the 2008 United States (US) and global quasi collapse have dramatically challenged the relevance of this reunification of growth and macro-economics with development theory (Boyer 2016).

The impressive modernization and rapid growth in China is a second source for a new thinking about development: the fuzziness of property rights, the intricate connections between the political and economic spheres as well as the control of credit and exchange rate by Beijing should have blocked the process of development launched by the liberation of competition in agriculture and then in industry. In spite of extensive and diverse research about this paradox, there is no consensus about an integrated new development theory that would explain why some countries are successful and others recurrently fail.

Precisely the diversity of national development trajectories puts at risk the pretense of dominant theorizing that postulates the universality of ‘one best development mode’. Clearly, the industrialization in India is not a duplication of the Chinese pattern; in Latin America, the ups and downs of Argentina contrast with the relative continuity of the Brazilian economy and polity. The hopes raised by Africa rely upon still different patterns of development, and they differ from Nigeria to South Africa. The ‘one size fits all’ approach had to be replaced with another that could recognize and explain the coexistence of diverse socio-economic regimes promoting development.

The historicity and diversity of capitalisms is the central theme for *régulation* theory: first created for analyzing the post-World War II (WWII) ‘Golden Age’ in Organisation for Economic Co-operation and Development (OECD) economies, it was extended and generalized when tentatively applied to Latin America (Venezuela, Chile, Mexico, Argentina and Brazil). Briefly surveying how the definition and explanatory factors of development have evolved since the 1950s is thus useful, and it helps in understanding the institutional turn of contemporary development theorizing. Its interest is to point out the variety of coordinating mechanisms: beneath the traditional opposition between states and markets, firms, networks, associations and communities are generally associated in delivering viable institutional configurations. These are especially important for under-

standing the process of development that is more complex than the choice of an optimal mix between state interventions and market automatisms. On this basis, *régulation* theory proposes a method for detecting the relevant institutional forms that mediate the micro and macro levels.

Do they cohere into a viable set of short-, medium- and long-term mechanisms? If so, after a trial-and-error process a specific development mode can be observed. Nevertheless, an underdevelopment trap or a succession of short-lived booms and crises might be the outcome of the structural mismatch between these institutional forms. Given the great transformation of society associated with the process of economic development, does the political regime provide the required intermediation between different and frequently conflicting interests? The interactions between polity and economy call for a political-economy approach to development. This framework delivers an explanation of the diversity of national trajectories within both Latin America and East Asia. The panorama of contemporary development modes suggests a provisional taxonomy centered on a limited number of key configurations. Finally, this approach is compared to other old and emerging paradigms.

TAKING INTO ACCOUNT HALF A CENTURY OF DEVELOPMENT HISTORY

Development theory per se was seen as a distinct discipline only after World War II. Since then, the development concept has gone through an endless series of redefinitions and reinterpretations. To carry out a forward-looking analysis of development, it is useful to take a quick look at the different definitions that have been successively attributed to the processes at work in those economies that were once described as ‘peripheral’ (Table 20.1).

A Focus upon the Obstacles to Growth after WWII

The first and most elementary definition stresses the self-perpetuating nature of growth, as opposed to simple phases of acceleration in a transient economic situation. This criterion actually relates to an important aspect in development, that is, a country’s entering a phase of permanent growth – as opposed to its tendency to stagnate, or to experience the sort of very slow growth that was typical before the sixteenth century (Braudel 1979; Bairoch 1995).

Of course, growth could be a product of demographic changes rather than of rising standards of living. Hence a second definition stressing a quasi-continuous rise in per-capita consumption as a criterion of development is considered here in the strictly economic sense of the term. It is this definition that theories of growth usually use, in line with a tradition that goes all the way back to the Harrod or Domar models; although the canonical form is found in a neoclassical emblematic formalization (Solow 1956, 1957).

Still, neither of these meanings accounts for a third essential component, the transformations of technologies and organizations that accompany the economic growth process per se. The development concept itself introduces the idea of a qualitative transformation and finds a significant reference in the Schumpeterian theory of development, as long as

Table 20.1 *A historical look at the substance and at the purpose of development*

Explanatory goals factors	Contents/ Development of capital	Self-perpetuating growth	Higher standards of living	Technological and organizational modernization	Human development (health education)	Less poverty	Empowerment	Development as a form of freedom	Ecological sustainability
		Neo-classical theory of growth Solow (1956, 1957)		Schumpeterian theory Hagen (1962)					
Entrepreneurship				Theory of equilibrium Schultz (1964)					
An appropriate pricing system				Open economy model Krueger (1979)					
The opening up of an economy									
Human capital				Theory of endogenous growth Lucas (1988, 1993)					
The basic institutions of capitalism				The new institutionalism North (1981, 1990)					
Good governance								World Bank (1993–2001)	
Absence of corruption				State and corruption Mauro (1995)					
Democracy								Democracy and Growth Barro (1996)	
Promotion of rights and freedom								Development as a form of freedom Sen (2000)	
Environment									Ecological model Meadows et al. (1972), Chakravorty et al. (1997)

this application is not limited to entrepreneur inventiveness or to their entrepreneurial spirit.

A Progressive Extension of the Scope of Development Theory

This notion can be extended further by incorporating one of the main findings of historical demographics: the spectacular human development that has taken place over the past two centuries. This has occurred at different levels: physical (growth in people's average size), health-related (longer life expectancies at birth) and intellectual (rise in collective and individual knowledge through literacy and numeracy, and more generally by learning to think analytically and abstractly). It is important to note that these variables define the objectives and content of development, not just one of its preconditions as has been assumed in recent studies of endogenous growth (Lucas 1988, 1993; Romer 1990). This received wisdom is the basis of the human development indicators that the World Bank uses. Published at regular intervals, these indicators lend themselves to a ranking that is somewhat different from classifications based on per-capita income (World Bank 1998, for example). This demonstrates the multidimensional nature of development.

An analogous divergence emerges whether national performances are measured by growth rates or by reductions in levels of poverty. Of course, economic dynamism provides the necessary resources for alleviating distribution-related conflicts (Collier et al. 2001), but nothing guarantees that the least well-off will receive their fair share of the dividends of growth. Much depends on the distribution of property, and on the institutions that shape the pricing and rewards systems (Adelman 2001a). Hence a sixth definition of development as poverty reduction, poverty being defined here as the deprivation of a decent life.

Social and Ecological Sustainability as Key Components of Development

Development analyses and theories of justice can be linked in an attempt to come up with a more general definition. According to Rawls (1987 [1971]), development can be defined as the recognition that all individuals have basic rights, notably the right to operate in a framework that enables everyone to fulfil their potential as far as possible. This conception finds its extreme version in a definition that is radically opposed to a purely economic vision and which assimilates development with freedom in the social, political and economic order (Sen 2000).

Lastly, increasing environmental problems have caused certain analysts to stress the ecological sustainability of a given mode of development, this being a criterion that will ultimately be extended to the idea of primacy of the economic regime's social acceptability and political sustainability. This final definition has a distant origin in the Malthusian interpretation of development as a conflict between economic dynamism and the exhaustion of natural resources. It has, however, taken on new forms, first when oil and raw materials prices skyrocketed during the 1970s (Meadows et al. 1972), and later during the 1990s, due to the fear of global warming (Godard et al. 2000).

All in all, over the past half-century the development concept has been considerably transformed, to the point that it now encompasses a whole series of objectives relating to the quality of the economic policy being followed, the investments being made in health

and education as part of the reproduction of a society's overall structure, and political acceptance of a given economic order, without forgetting the imprint of economic activity on the ecosystem. From its original ad hoc and limited relevancy in a domain that was purely economic in nature, the concept has been extended to cover most of the spheres that comprise a society as well as the interrelationships between them. This has been achieved through the use of a systemic approach, even if this term has rarely been used (Adelman 2001a). An analogous tendency has been observed concerning the different schemes for interpreting development, as well as non-development.

CONTEMPORARY DEVELOPMENT THEORIES: AN INSTITUTIONAL TURN?

One important variant of such a systemic approach stresses the role of institutions within a whole spectrum of coordinating mechanisms complementing and shaping the markets.

The Bifurcation of the End of the 1990s

Many different lines of reasoning, relating to theoretical precepts as to the correction of erroneous development strategies, argue in favor of the emergence of a more balanced conception of development. We cannot help but acknowledge the role that institutions play, and the need for a more integrated approach (Figure 20.1).

At a theoretical level, researchers are no longer handcuffed and forced to talk solely about market mechanisms. This is because they have explained the role played by extra-market coordination mechanisms in the appearance of growth paths, or in the emergence of types of equilibrium that are more favorable than the ones which would result from a mere interaction of individual strategies functioning in the marketplace alone. This allows us to interpret the emphasis that has been placed on imperfect information, the interdependent nature of actors' preferences and strategies, and of course on those externalities that are associated with education, research or even with some of the public infrastructures that can be found in traditional rural economies (as well as in many developed

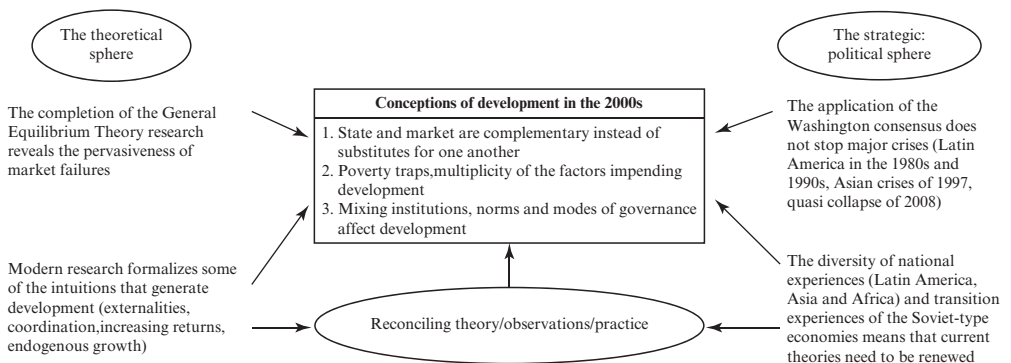


Figure 20.1 Towards a systemic and institutional approach to development: sea changes after the 1990s

ones). By so doing, today's researchers are returning to some intuitions first held by the founders of development studies; with the novelty that they are now in a position of producing formalizations that can enable a clear explanation of the logic driving interactions which can lead, for example, to societies becoming stuck in a poverty trap, or to equilibriums being based on low levels of education and on high fertility rates (and therefore on low income levels). As Hoff and Stiglitz have stated (2001, 427):

In many respects the theory of development has gone the full circle. 30 or 40 years ago, there was an emphasis on the different links between the social and economic spheres . . . Nowadays formalized theory has been extended to a number of areas relating to imperfect information and incomplete contracts. These studies have shown that, in a variety of configurations, extra-market interactions lead to complementarities that can be associated with multiple equilibriums . . . These not only involve endogenous types of institutions, choices and prices – but also preferences and technologies.

This type of approach also incorporates one of the main stylized facts of the past 50 years, to wit the great diversity of the national experiences of development, for instance in Asia (Boyer et al. 2011); something that cannot be accurately reduced to a simple opposition between a pure canonical model and various degrees of imperfection. In addition, the allegedly impossible economic development of those countries that are 'lagging behind' did actually take place in a certain number of national configurations. Nevertheless, even within those countries that were able to launch a process of development, it took on forms that varied from one country to the next, given that, in the words of Adelman (2001a, 67), 'the process of economic development is simultaneously multi-dimensional and essentially non-linear. It leads to dynamic transformations not only in the modes of production and technology but also at the level of its social, political and economic institutions, as is the case with human development models'.

Examples of this abound. It suffices to compare the different countries of Latin America to notice major differences, even greater than the variations that can be accounted for by the traditional opposition between a typical Latin American industrialization strategy (based on import substitution) and the South East Asian preference for an export-driven type of growth (Ominami 1986; Aboitès et al. 1995). Similarly, the Asian countries' 1997 financial crisis did not fit into the same mould as the Latin American countries' crises, since each involved differing styles of development, political choices and types of finance-driven disruption. Lastly, the Eastern European countries' development clearly reveals contrasting trajectories in terms of privatization, the reconstruction of the state and economic restructuring, with the political environment playing an essential role in the economic and social system's capacity for transformation (Chavance et al. 1999).

We should not neglect the way in which the Asian crisis led to questions being asked about the Washington Consensus, which had been trumpeting the general principles that it considered to be valid everywhere: budgetary discipline, fiscal reform focusing on economic incentives, financial deregulation, elimination of barriers to international trade and to competition, privatization and liberalization. As stated by the father of this conception of development, such principles are not necessarily totally erroneous – but they have to be applied flexibly, and rounded out by at least two more ingredients. First of all, there is a need '(to build) key institutions such as an independent Central Bank, a strong budgetary administration, an independent and incorruptible judiciary and agencies to

develop such productivity missions'. Secondly, it is important to 'increase spending on education and to redirect this towards the primary and secondary sectors' (Williamson 1997, 58). By so doing, it should be possible, in this view, to fill the gap that has steadily arisen between advances in economic research and the prescriptions of international organizations such as the World Bank and the International Monetary Fund (IMF); even if this inevitably created a degree of tension within these very same organizations.

All of these factors have made it increasingly likely that there will be no return to previous conceptions of development. First of all, the main issue is no longer one of choosing between alternative and unilateral principles of coordination: the market or the state. An ever-increasing number of analysts recognize that 'an appropriate mix between the state and the market is necessary to the promotion of development. This mix has to be adapted dynamically so that it can stay in tune with advances in development' (Adelman 2001a, 103). Furthermore, no single factor can explain the blocking of development, since a whole range of factors are generally at work in any trajectory we observe. The diagnostic therefore needs to reflect precisely the context. Finally, the development process is characterized by its strong sense of history, inasmuch as 'the choices that are being made give birth in turn to the initial conditions of later development' (Adelman 2001b, 72). This is an economic historian's point of view, one of whom concluded by calling for 'a little more history and a little less of a regression-based interpretation of growth' (Crafts 2001, 326).

A final quote summarizes the road that has been travelled by a half-century of development: 'Development processes and policies are interdependent and present a multiform, dynamic and non-linear nature. Development thus continues to infer a modification of the mechanisms, modalities, agents and institutions that are necessary for its promotion. The only constant in development is *systematic dynamic change*' (Adelman 2001b, 108). However, there are still other reasons for this *aggiornamento* and they relate to changes in economic theory itself.

A Multiplicity of Coordination Mechanisms and the Rise of Institutional Theories

The aforementioned developments are largely part of the 'state-market axis', assuming that these are the only two forms of coordination currently operating in the world economies. Advances of socio-economy offer at least four other forms of coordination that are capable of playing a significant role in development: the organization (or the firm), the community and more generally the civil society, associations and, last but not least, networks.

Accounting for these different forms of coordination infers the need to progress beyond strictly mono-disciplinary approaches that usually revolve around political factors, the role of law, the nature of the social contracts and the general logic underlying a given action – and no longer principles of economic rationality alone. A first effort in this direction has already made it possible to put together a taxonomy of forms of coordination, which can be put to good use by the various disciplines of social science (Hollingsworth and Boyer 1997). Most of the forms that have been observed can be described using a double characterization (Figure 20.2).

First of all, it is important to contrast purely horizontal relations between agents who are basically endowed with the same powers, and relations that to the contrary are vertical and based on unequal status, information and wealth. Typically, a market, which is a

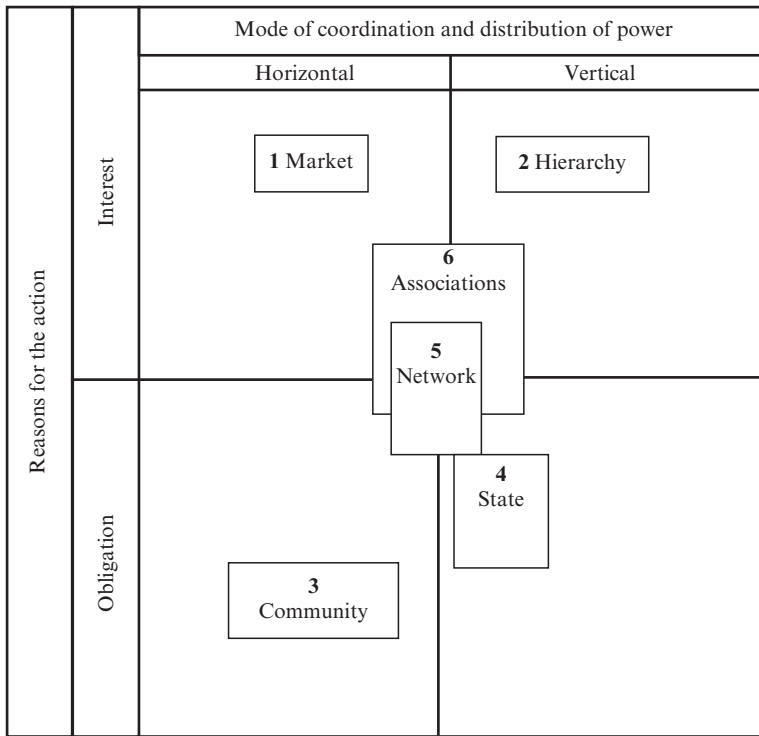


Figure 20.2 State and market are nothing more than two specific forms of coordination

form of horizontal coordination, exists in opposition to a private hierarchy, whose flagship form is the firm.

The logic underlying the action itself can be part of two clearly distinct registers. Either purely individual interests guide actions, as indicated in both economic theory and in rational choice analysis, or else it is the strength of the social, moral and cultural contract, in short, the obligation, that determines the actions of a *Homo sociologicus*, traditionally contrasted, on a trait-for-trait basis, with *Homo oeconomicus*. These two criteria make it possible to come up with at least six major types of institutional arrangements.

The market combines a form of horizontal coordination with an action logic that is governed by individual interest, usually apprehended in its utilitarian form. Private hierarchies such as the firm apply this same conception to unequal relationships, inasmuch as their drivers (in this case, their owners) possess a power that enables them to dispose of their employees' time at work. Inversely, the community operates within the register of an obligation that is attached to the strength of the social contract: in theory at least, it is based on relationships that are supposed to be egalitarian. It is within this space that a subtle process of trust is born.

Networks occupy a central role within this typology since they combine obligations and interests (in variable proportions) and can be broken down according to a variety of modalities that are predicated on the more or less egalitarian nature of the relationships which exist between the various members of the network. This form of coordination is

central in modern innovation processes. Partnerships have very often been involved in the development of those rapidly changing new technologies which have come out over the past few years, advances that infer large-scale investments which, from a rational point of view, it would be best to share.

Along these lines, associations, whether trade groups or labor unions, generally combine a defense and promotion of interests that can be economic, political and social in nature. As opposed to networks, which operate according to a market-based production logic, an association's function often involves the management of collective goods: codes of conduct, technical norms, vocational training for a given sector of activity, the representation of the constituency's interests to the state. Last but not least, the state has a unique position, combining an obligation principle (citizens are not free to rid themselves of its authority and have to pay taxes) with a clearly asymmetrical type of power (laws apply to each citizen, whereas not everyone is involved in the making of laws).

THE ORIGINS OF THE MAIN INSTITUTIONAL FORMS: AN INTERMEDIATE-LEVEL ANALYSIS

The task is then to make explicit what the key institutions are that govern development, in the spirit of Commons (1990 [1934]). Let us call them institutional forms and try to explicate how they combine various coordinating arrangements and what the forces are that generate and transform them.

How Do They Emerge?

In societies where democratic regimes prevail, macroeconomic developments have an impact on the political preferences of various social groups. Periodically they express themselves during elections, after which a new government is formed. Its effectiveness is up to the coherence and stability of a political alliance aggregating different social and economic interests. Following Antonio Gramsci, this can be labeled a hegemonic block, the power of which can be deployed in various spheres such as the capital-labor relation, the degree of competition, the tax system and the structure of public spending, as well as the nature of the integration into the world economy. The related arrangements are called 'institutional forms', which generally deploy several of the coordinating mechanisms previously presented (Figure 20.2). They convert power in the political arena into an ability to shape the incentives and constraints within the economic sphere (Figure 20.3).

This 'top-down' construction of institutional forms is not the only path involved. They can also be the outcome of 'bottom-up' processes by which struggles operating at an intermediate economic level lead to local and/or institutionalized compromises that are validated or not by political authority. Many societies are characterized by corporatist institutions, clientelism and lobbying of various socio-economic groups that aim at controlling the development of rules and organizations that will govern their activity (Bizberg and Théret 2012). This is observed in developing and developed societies.

There is no assurance therefore that the individuals' behaviors and strategic interactions that derive from this institutional architecture brings a consistent mode of *régulation*, defined as the short- to medium-term macroeconomic adjustments pattern. Thus a

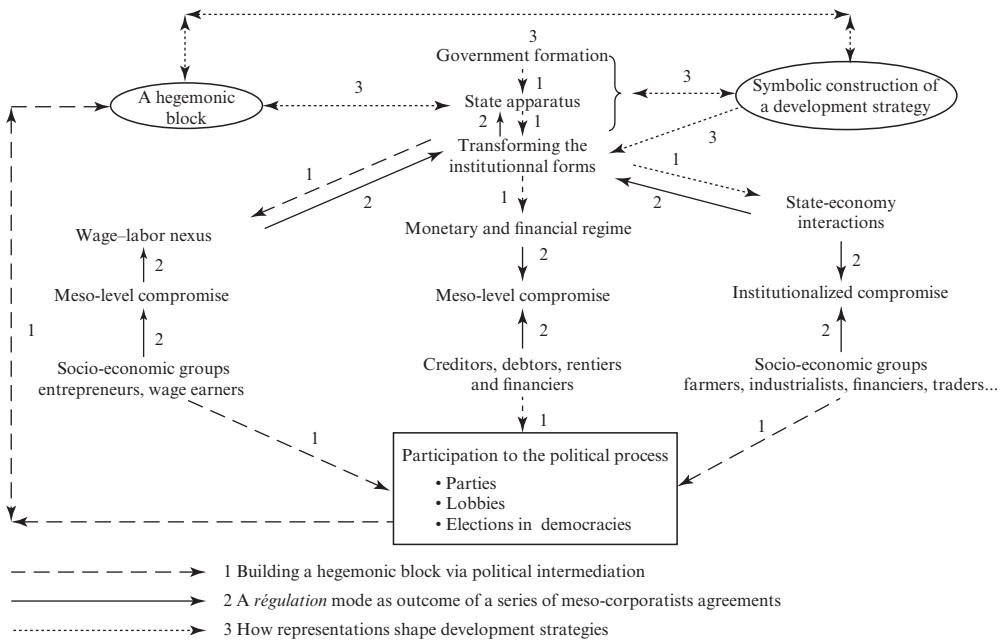


Figure 20.3 How do institutional forms emerge? Three channels

third method is available for tentatively reducing the heterogeneity and mismatch among scattered institutional arrangements: the symbolic construction of a development strategy, in order to shape expectations and thus a multiplicity of decisions (Marques Pereira 2012). Nevertheless they play an increasingly active role, the more frequently they are translated into laws, norms, collective agreements or tax incentives.

The Specificities of Developing Economies

This taxonomy of the sources of institutional emergence does not fully capture some of the key features of developing economies. Formal institutions interact with more implicit and traditional processes less transparently, but frequently they are decisive in shaping the development or the absence of development. In many instances, rules and laws are not applied or even implemented: they are simply the starting point for negotiating. For example, corruption might be the device for converting restrictive institutions into enabling opportunities for private actors. It would be naïve to confuse the context with the outcome of individuals' interactions, as pointed at by game theory applied to the emergence of institutions (Aoki 2002). A shadow economy, far away from the supervision of public authorities, might organize a large fraction of the population, and this challenges naïve institutional analysis: is it an approximation of pure competition, or, on the contrary, does it hide asymmetric power relations and strong *de facto* organization of economic activity (Alba 2011)? Last but not least is the question of how to deal with economies where 70 percent of work is informal, as observed in many Latin American economies.

A second difficulty relates to the nature of a political regime. Is it sufficient to observe periodic elections and competing political parties to conclude that it is democratic? In many countries, beneath the reassuring principle of 'one citizen, one vote', the power in the economy and polity might remain oligarchic: the analysis of constitutional law should be completed by a sociological investigation about the ruling elite. This divergence between appearance and effective power distribution is present in many developing and developed economies as well (Wright and Mills 1956). Nevertheless, since for instance in many Latin American countries the democratic transition is relatively recent, the gap between formal equality of rights and power of elites is a real challenge addressed to alternative development theories.

The new US institutionalism stresses that the constitutional order is the founding bloc of any society and economy (North 1990), possibly mediated by representations and cognitive processes and learning (North 2004). In many African and Latin American societies, the stability of the constitution used to be at stake since recurrently some political struggles were about its change, and not only the replacement of one government by another. This move could be from a democracy to an authoritarian regime, and since the 1990s from dictatorship to democracy. This challenges the relevance of an institutional analysis: it takes time to convert the rules of the game into effective strategies for development, and thus political instability is frequently associated with an underdevelopment trap. Are there some processes, then, in the economy or in the polity, that could favor the emergence of viable development modes?

HOW DO VARIOUS INSTITUTIONAL FORMS COALESCE INTO A VIABLE MODE OF DEVELOPMENT?

This is the core of *régulation* theory: how to explain that institutional components designed independently of each other, since they depend on local power relations and partial interests and concerns, can ultimately deliver a system capable of reproducing through time, even at the price of cyclical crises.

Compatibility, Complementarity, Hierarchy and Coevolution

This is one of the key issues investigated by contemporary research in institutional economics, and many hypotheses and theories have been put forward. Organizations and institutional architectures are, for instance, supposed to minimize transaction costs, or alternatively they could be the outcome of fully rational individual strategies in search of an optimum, and so on. Another avenue is explored here, following a breakthrough by theoreticians who tried to understand why modern productive organizations do not exhibit any continuum but are clustering around a very limited number of configurations (Milgrom and Roberts 1990). Under the name of 'super-modularity' they point out the hypothesis of 'complementarity': combining two managerial devices delivers better outcomes than the simple adding of their performance when used separately. For instance, at the macroeconomic level, financial systems and innovation systems are complementary (Amable et al. 2005). Super-modularity has to be distinguished from a series of related concepts. There is a mere 'compatibility' if no extra benefits are reaped,

BOX 20.1 FOUR MECHANISMS

1. *Complementarity*: Two elements E and E' are said to be complementary if the performance R of the conjunction of E and E' is superior to any other mix of elements, that is:

$$R(E, E') > R(E, A) \quad \forall A \neq E' \text{ and } R(E, E') > R(B, E') \quad \forall B \neq E.$$

2. *Compatibility*: this second notion is frequently confused with the first one . . . but it should not. In fact, E and E' are compatible if they can be jointly observed in existing economies and societies, that is, $E \cap E' \neq \emptyset$.
3. *Hierarchy*: This is a third relation between entities, with the implication of causality from E to E' . Basically, if E , then among a set (E', E'', E''', \dots) there is one E' such that $E \cap E' \neq \emptyset$ and $E \cap E'' = \emptyset$, $E \cap E''' = \emptyset$, . . .
4. *Coevolution*: The observation of the joint occurrence of two institutions or organizations might be the unintended outcome of mechanisms of selection and learning.

or a 'hierarchical domination' if one entity has the power to shape another one. What are the processes that might lead to such configurations? Selection and learning are two mechanisms involved in the co-evolution of organizations, institutions, economic and social policies (Box 20.1).

These concepts have proven to be quite useful for understanding the clustering of the observations of various international comparisons, not only of firms' productive organizations but also of their governance structures (Williamson 1990). At an intermediate level, social systems of innovations are also distributed according to various complementarities between research, education and financing (Lundvall 1992; Amable et al. 1997). The variety of the capitalism approach emphasizes the homology between firm-level productive complementarities and those operating at the macroeconomic level (Hall and Soskice 2001), whereas another conception stresses the primacy of institutional forms' complementarities that in turn shape organizational choices of firms (Amable 2004). All these concepts have raised a lively discussion among scholars involved in various social science disciplines. The following developments apply this approach to development.

From Institutional Forms to a Macroeconomic Regime: Back to the History of Developed Economies

Régulation theory was elaborated in order to analyze the long-term economic history of the US (Aglietta 2000) and French capitalisms (Benassy et al. 1978): how have they developed successive socio-economic regimes? Capital accumulation is considered to be the driving force of development, and conversely its blocking might be the main source of underdevelopment. But since accumulation is a fairly uneven and contradictory process, we have to investigate under what conditions the conflicts and disequilibria inherent in capital accumulation nevertheless deliver the possibility of periods of sustained growth. Basically, cumulative growth will be possible if the four basic institutional forms which define a capitalist economy promote a productivity regime on one side and a demand regime on the other, which are coherent *ex post*, that is, able to define a growth regime, with the property of self-equilibration with respect to both internal dynamics and possible external shocks. This coherence might result from

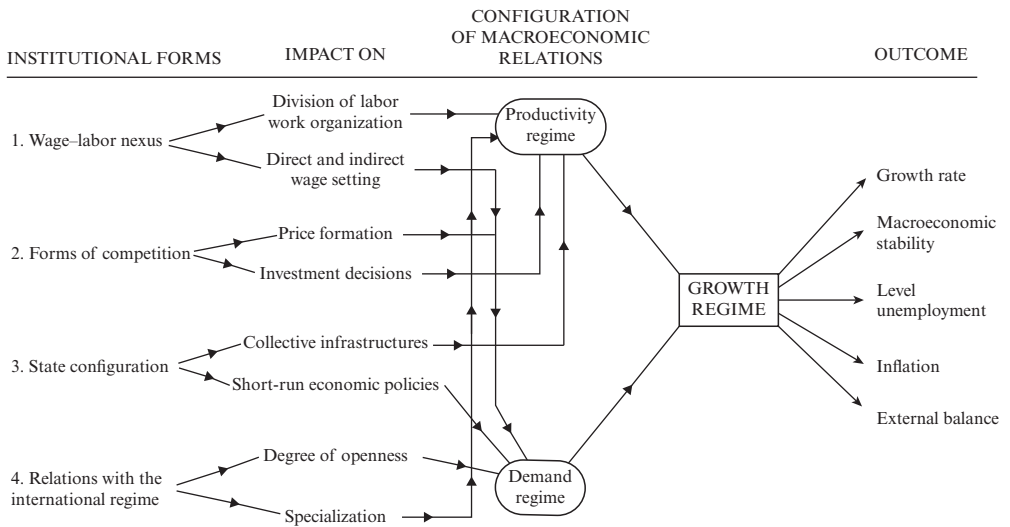


Figure 20.4 The complementary institutional forms that sustain a viable growth regime

complementarity or hierarchical domination of one form over the others. I now briefly present the broad relationships between the basic institutional forms and long-term growth (Figure 20.4).

First of all, the wage-labor nexus describes the configuration associated with a given state of the division of labor, as well as of income distribution. Following the initial hint by Adam Smith, which was taken a step further by Marx, the forms of production organization within firms and their relations with the market are the key factors shaping a productivity regime. Briefly, each stage in the history of the division of labor is associated with particular determinants of productivity increases, which combine in various degrees the impact of specialization, learning by doing, the design of equipment and the minimum scale for efficiency (Boyer and Schmeder 1990). An economy composed exclusively of craftsmen and pin manufacturers, or Fordist assembly-lines and Silicon Valley high-tech firms, would clearly exhibit contrasting productivity regimes. This distinction is crucial for development economics: there is no natural and general form of production function.

Secondly, conventional growth theory has been built around the hypothesis of pure competition, just for simplicity's sake (Solow 1988). But it is clear that in most economies imperfect competition prevails, whatever its origin: barriers to entry, uncertainty about quality, collusion among a small number of producers, and so on. Identifying these forms of competition is important for any analysis of price formation and of course investment decisions. The new theories of industrial organization convincingly argue that the dynamics of profit, investment and price are highly sensitive to the institutional setting which codifies the relations between firms (Tirole 1988). This can explain differing trajectories in terms of capacity utilization, investment or even innovation. So productivity regimes partly result from the forms of competition (Figure 20.4).

The state has, then, to be introduced into the analysis. Property-right theoreticians

have pointed out the role of the constitution and the law as prerequisites of any capitalist market economy. The past experience in introducing market mechanisms in Eastern Europe clearly shows how crucial these institutions are for investment and growth. A similar remark can be made concerning the poorest underdeveloped countries: the weakness or non-existence of some basic institutions might, to a significant extent, explain recurrent scarcities or even famines. Under this general heading, the viability of any contract supposes not only laws and jurisdictions but also a rather stable monetary system. In the writings of Adam Smith, specialization and deepening of the division of labor can only occur if market relations are stable over the foreseeable future. At the same time, the modern state in advanced capitalist countries has extended its interventions toward the supply of many collective goods which are necessary for the efficiency and growth of a market economy: education, training, health care, transport infrastructures, telecommunications and support to innovation. Consequently, state interventions contribute to both the productivity and the demand regimes.

A fourth institutional form relates to the nature of the international regime on the one hand and the integration of a given country or region into this regime on the other. In each historical period, there exists a set of institutions, explicit or implicit rules which define the rights and duties of any country concerning external trade, short-run capital movements, exchange-rate determination, foreign investment, property rights and so on. Consequently, the constraints and opportunities created by a given international regime are to be taken into account in any analysis of long-term national growth (Mistral 1986). Similarly, within such a regime, countries may experience varying degrees of openness, control over the price of exports, and of course diverse forms of specialization (primary or intermediate products, low- or high-quality consumer goods, capital goods, and so on). Therefore the productivity regime is clearly influenced by the insertion into the international economy: from a quasi-closed continental economy to a small open country, there is a whole spectrum of configurations.

The multiplicity of long-run historical studies has delivered various formalizations of development modes observed since the first industrial revolution (Boyer and Saillard 2001). In the nineteenth-century competitive *régulation*, the institutional forms were essentially compatible, whereas after WWII the Fordist growth regime was the outcome of the complementarity between an unprecedented institutionalization of the wage-labor nexus and a mass production system in the context of a stable and permissive international regime. The contemporary configurations are still different because the hierarchical position of world competition and more recently financial globalization has shaped the redesign of most other institutional forms.

Contemporary Development: The Resurgence of Rentier Economies

Therefore, contemporary developing countries cannot follow the same path that mature capitalisms did two centuries ago. A first reason originates in the externalities generated by the economies that were successful in mastering industrial revolutions: they reaped the cumulated benefits of their breakthroughs and implicitly or explicitly erected barriers to the entry of newcomers. Hence a first theorizing of the absence of development emerged: the industrialization of the center had for its counterpart the underdevelopment of the periphery. For instance the rise of the British textile industry nearly destroyed the Indian

one. Latin American scholars have proposed another theory for underdevelopment: world trade has been organized for the benefit of leading industrialized countries, since they buy primary resources and sell manufactured goods and enjoy quite favorable terms of trade. This dependency means the emergence and resilience of a totally different socio-economic regime, which could be labelled as rentier (Figure 20.5).

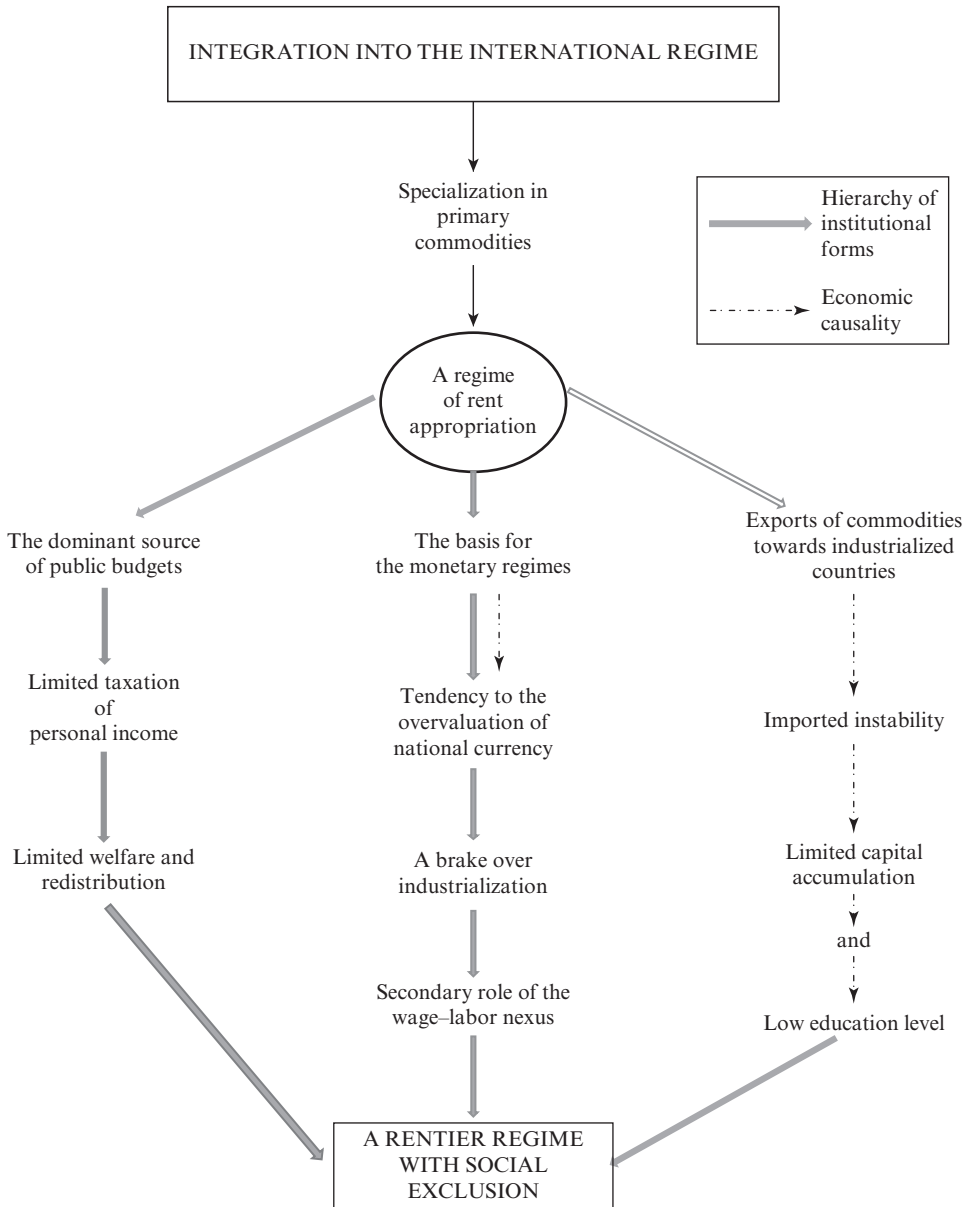


Figure 20.5 *The hierarchical of institutional forms of rentier regimes*

The integration into the world economy appears as the dominant institutional form since the revenues from commodity exports are simultaneously the main source for financing the state, the method for monetary creation and the leading engine of macro-economic activity. This domination allows a low taxation of domestic income, hence a limited redistribution and generally a low level of welfare. Political struggles are related to the appropriation of rent and not so much to the search for the support of citizens as an exchange between consent and taxation. The high benefits associated with commodity exports distort the allocation of capital away from the industry, the more so, the larger the current account-trade surplus. Therefore the wage-labor nexus is quite secondary since the employment in the export sector is quite limited and the industrialization is hindered. Such a rentier regime usually displays a large volatility in response to the ups and downs of international trade, and this inhibits capital formation both productive and in education, research and innovation (Panigo 2008).

This institutional approach was first tested against the Venezuelan experience and revealed a genuine socio-economic regime (Hausmann 1981), at odds with the typical industrial-led configuration based on the complementarity of an institutionalized wage nexus and mass production of manufactured goods (compare Figures 20.4 and 20.5). It is quite different from the conventional neoclassical analyses that stress the curse of primary resources or a Dutch Disease linked exclusively to the overvaluation of the domestic exchange rate that adversely affects the allocation of capital, compared with an industrialized market economy.

On one hand, the whole structural and institutional configuration is involved, and this is not merely a transitory deviation from market mechanisms. On the other, rentier regimes basically complement industrial-led configurations, since they cannot be analyzed separately. When the latter are booming, the former prosper too, but if the world trade collapses the structural limits of a rentier development mode are revealed.

This is precisely the history of the last two decades with the emergence of the BRICS countries (Brazil, Russia, India, China, South Africa). This acronym concatenates quite contrasted development modes: highly industrialist in China, typically rentier in Russia and a hybrid configuration in Brazil. This is an invitation to push a step forward with the analysis of the various development modes (see Table 20.2). Their diversity is not only a matter of economic specialization but also an issue of political economy.

A POLITICAL ECONOMY OF DEVELOPMENT: *REGULATION* THEORY

The institutional turn of development is not simply an extension and refinement of the contemporary economic discipline: instead, it is a call for a better understanding of the mutual interactions between economy and polity. *Régulation* theory has explored this path since the seminal researches on the US (Aglietta 1978) and French capitalisms (Benassy et al. 1978).

The Yin and the Yang of Polity and Economy

This framework proposes three channels through which political processes and economic development interact: the emergence of institutionalized compromises that shape the evolution of institutional forms, the formation of political coalitions at the national level and finally the impact of representations and theories on strategies of public and private actors (Figure 20.3). Therefore, even if developing countries share many structural features, the nature of the relationship between these three processes varies from one society to another, so that their modes of development are far from converging, beyond the growing impact of internationalization and financial globalization.

In Latin America, for instance, since the 2000s, Argentina, Brazil and Chile have experienced contrasting trajectories, different conceptions of monetary and exchange rate regimes have shaped their respective modes of development (Marques Pereira 2012), and the contrast is even greater when we include Mexico in the analysis (Bizberg and Théret 2012). This also gives an interesting insight into the dynamics of institutional forms and development: the alternating phases of relatively stabilized growth and of cyclical crises may finally generate, in some cases, a structural crisis. This complex dynamic is largely explained by the different time lags that govern evolutions in the polity and the economy.

Unlike the standard theory which attributes business cycles to untimely decisions of governments that disrupt a structurally stable market economy, this reading actually captures the two-sided causality between the polity and the economy. On one hand political decisions shape the creation and transformations of institutional forms, away from pure market mechanisms. On the other hand, these changes redistribute economic power and income among various social groups, and in turn this affects their degree of agreement or disagreement with government policies. Hence new decisions are made, and this starts a new round of interactions between the two spheres. This is to some extent a generalization of the theory of endo-metabolism (Lordon 1997), since the destabilizing factors can come from the slow alteration of the parameters of the development mode, but also from the impact in the political arena of the tensions occurring in the society (Figure 20.6).

A Co-evolution of Both Spheres: Some Examples

How important is the differentiation of political regimes for the nature of development? This question is widely discussed in the literature, especially concerning the relationship between democracy and development. For the modernization of backward countries, are authoritarian regimes most effective? De facto, there are contradictory examples in both Latin America and Asia. From the 1970s to the 2000s, authoritarian regimes were numerous in Latin America but they do not seem to have had the same supportive role as in Asia. Similarly, one observes no overall clear correspondence between the mode of development (either import substitution industrialization or export-led growth) on the one hand, and the political regime (a democratic or authoritarian) on the other. Some pioneering works (Marques Pereira and Théret 1999, 2001) emphasized the importance of a comparison of some emblematic cases in Latin America and Asia, respectively, but also the complexity of the ties that bind economic strategies and policy regimes. Within each of these two geographical areas, extremely contrasting national trajectories have been unfolding (Table 20.2).

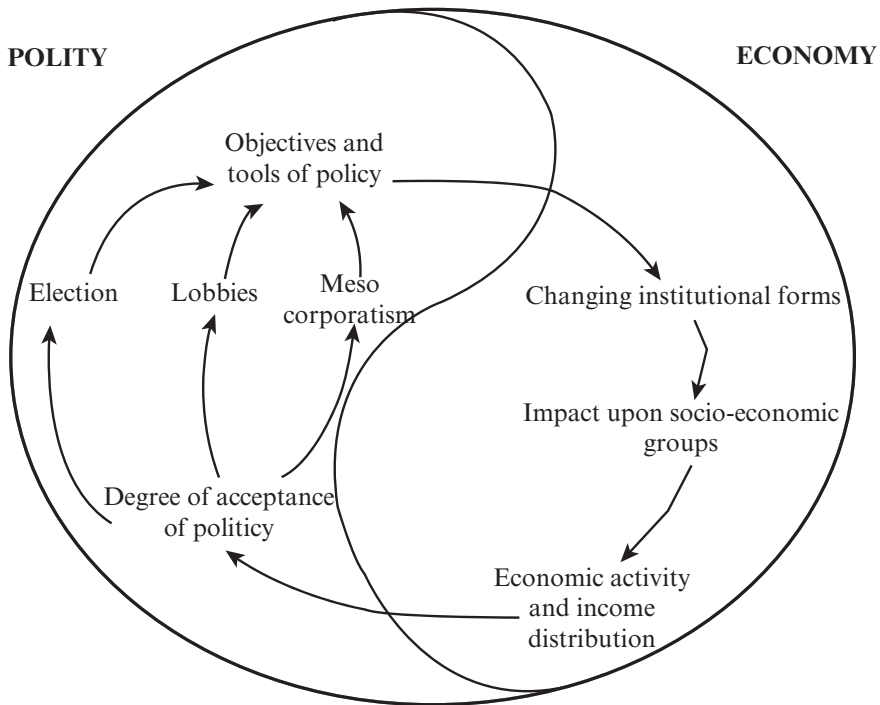


Figure 20.6 The changes in institutional forms: the interaction of polity and economy

Sometimes the political regime and the economic system are consistent, sometimes they conflict and manifest a particularly complex dynamic associated with the transition from one configuration to another. Stability is the exception, change is the rule, which invalidates the numerous analyses of political scientists who import the rational-choice theory of economics, in which the very possibility of historical time is removed.

Table 20.2 The relationship between economic strategy and political regime in some newly industrialized countries

Political regime	Regime alternating militarization and liberalization	Single-party regime originating from a revolution
Economic strategy		
Import substitution	Brazil (harmonic)	Mexico (disharmonic)
Export-led growth	South Korea (disharmonic)	Taiwan (harmonic)

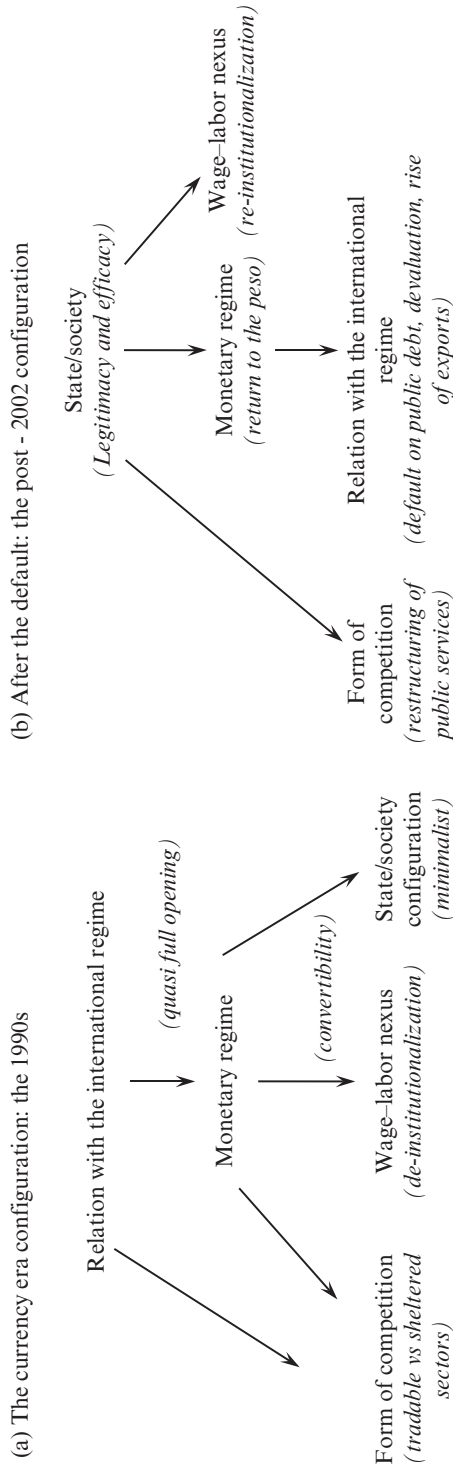


Figure 20.7 Argentina: after a structural crisis, political action may tilt the institutional architecture

During Systemic Crises, Polity can Alter the Hierarchy of Institutional Forms

An especially interesting juncture relates to the episode of structural crises: past economic determinisms break down because they generate a destabilizing of macroeconomic adjustments that deepen the crisis. In this context, only collective action can eventually search for and sometimes find a new institutional configuration, viable in both economic and political spheres. Thus, this framework highlights the possibility of tilting institutional hierarchies in response to a structural crisis. This occurred in the 2000s in both Argentina (Boyer and Neffa 2007) and Brazil (Miotti et al. 2012), and this resulted in new priorities in monetary policy, exchange rate and taxation (Panigo and Chena 2012) but also in the restructuring and re-institutionalization of the wage-labor nexus (Neffa 2012). These transformations took place not only along the market/state axis but also in the whole space of institutional architectures. Macroeconomic formalizations themselves have to take account of such a shift because causalities can be reversed and create breaks in macroeconomic regularities. For instance, a national economy that is totally dependent on its international trade, direct investment and financial flows no longer exhibits the same properties as those observed in an inward-looking regime (Nishi 2011). One can map the articulation of institutional forms in the Argentine economy, respectively in the period of convertibility (Figure 20.7a) and after the default on public debt and the political changes that allowed the recovery of a certain autonomy of state interventions that allows a renewed dynamism of the economy (Figure 20.7b).

China: A Development Led by the Acute Competition among a Multitude of Local Corporatism

The great transformation of former soviet-type economies after 1989 has allowed an extension of *régulation* theory (Chavance et al. 1999). It stresses the major differences between Russia (Sapir 1996) and Central and Eastern Europe on one side, and China (Chavance 2000) on the other. The impressive growth of China has been analyzed in the spirit of the Annales school (Braudel 1979) as the consequence of transformations within a long legacy, from the point of view of development (Aglietta and Bai 2012), with a potentially strong impact on international relations (Aglietta and Landry 2007). The starting point is thus the characterization of the basic social relation, embedded into specific institutional forms (Boyer 2011).

In the absence of a full-fledged legal system and a unique form of incorporation of firms, public authorities have the ability to define, at least locally and for a given period of time, the rights around the use of resources (land, raw materials, workforce, talents, and so on) and thus to legitimize some rules in the appropriation of future income flows. Under this umbrella, entrepreneurs may make decisions about production, investment and technology. When they are successful, they are creating value that can be allocated to reinvestment, social and infrastructure expenditure and contribute to the tax base of the related entity. Conceptually, this exchange may propel a virtuous circle involving bureaucrats and entrepreneurs. However, in isolation, such a system could become more predatory and corrupt than efficient in value creation. There are two additional features of the local-state corporatism. On the public side, each entity is partially accountable to a higher-rank entity that could correct the most detrimental forms of private appropriation

and corruption. On the business side, if local entrepreneurs make wrong decisions they will be penalized in the competition with other businesses nurtured by many other localities. Thus, the local-state corporatism has another relevant property: to articulate the various levels of Chinese society (Figure 20.8).

Some empirical evidence may support this hypothesis. First, the pro-growth nature of the incentive system associated with the 1978 reforms is clear enough concerning, for instance, the evolution of the steel industry. Initially, all the allocations were decided by the central government. Then, local government allocations began extending production, and after a while, the enterprise market sales were booming. A decade later, both central and local government productions have declined, to the extent that, at the end of the period, the supply of steel was largely privatized (Naughton 2007, 93). This means that in China, the state is neither typically Keynesian nor Beveridgian nor Bismarckian, since the provision by the state of education, health and housing has nearly vanished. By contrast, the state has been mainly the architect of a sophisticated web of incentive contracts linking economy to polity, and vice versa, localities to provinces and provinces to local economies.

The local-state corporatism builds a series of incentives enhancing dynamic efficiency (Wank 1999; Krug and Hendrichske 2007). This institutional form first allows the access and diffusion of information among and between local firms along with public authorities. It also promotes a pooling of risk that may be favorable to entrepreneurship. These interactions help in the stabilization of expectations and partially compensate the fuzziness of property rights. Finally, the density and relative stability of local social networks do favor a form of long-termism in investment decisions that do not have to react to the short-run variability of the market. These are dynamic mechanisms that may compensate the high transaction costs that the conventional theory puts forward as a drastic

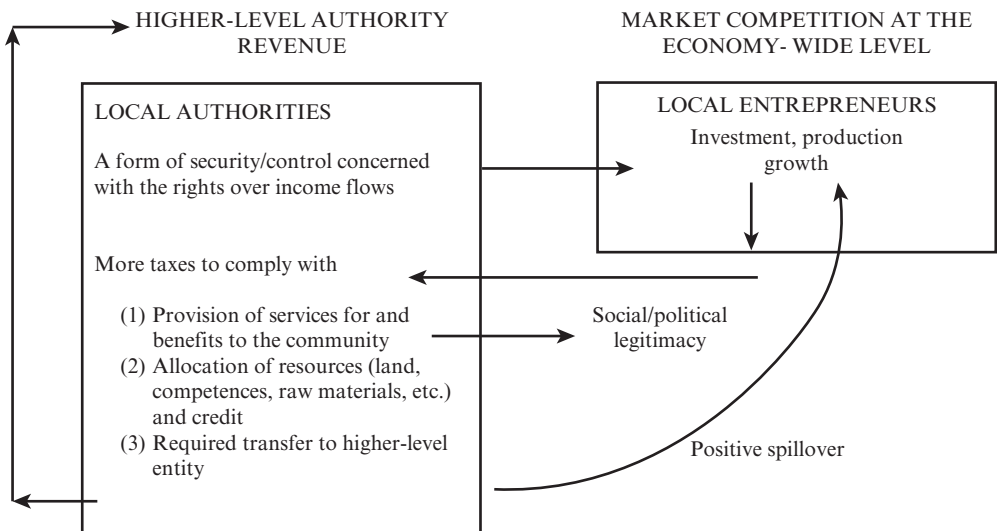


Figure 20.8 *The local-state corporatism hypothesis: a synoptic view of the Chinese basic organization*

hindrance to static efficiency. Similarly, the frequent corruption associated to state local corporatism might be perceived as a lubricant and not so much a brake to the dynamism of accumulation. Finally, the absence of a typical market for competent managers might be compensated by the cumulative experience built out of the successive positions, both public and private, of individuals.

This is an original feature of the Chinese growth regime with powerful consequences. The entry into the sphere of international relations is not determined from outside but rests essentially on a domestic decision. In quantitative terms, the openness of the Chinese economy is impressive, but when evaluated in qualitative terms, public authorities retain a remarkable amount of control over entry of capital, the management of norms, the interventions in the exchange market and the accumulation of large reserves in order to prevent the occurrence of the equivalent of the 1997 Asian crisis. The core argument of this analysis of the large trade surplus is not the expression of an ideological or doctrinal adhesion to mercantilism but the projection of the domestic accumulation regime into the world economy (Figure 20.9).

There is a clear hierarchy whereby the integration into the international economy is the consequence of the mismatch within domestic institutional forms. Nevertheless, Chinese officials are not free to conduct a fully autonomous external policy. In a sense, they have to react to the highly specific dynamism of a competition-led accumulation regime. Cutthroat competition is the engine for an overinvestment tendency (Minqi 2007). Given the dependent nature of the wage-labor nexus, segmented, serialized and for many workers competitive, the related overcapacities cannot be reduced through the dynamism of household consumption. De facto, the weak bargaining position of

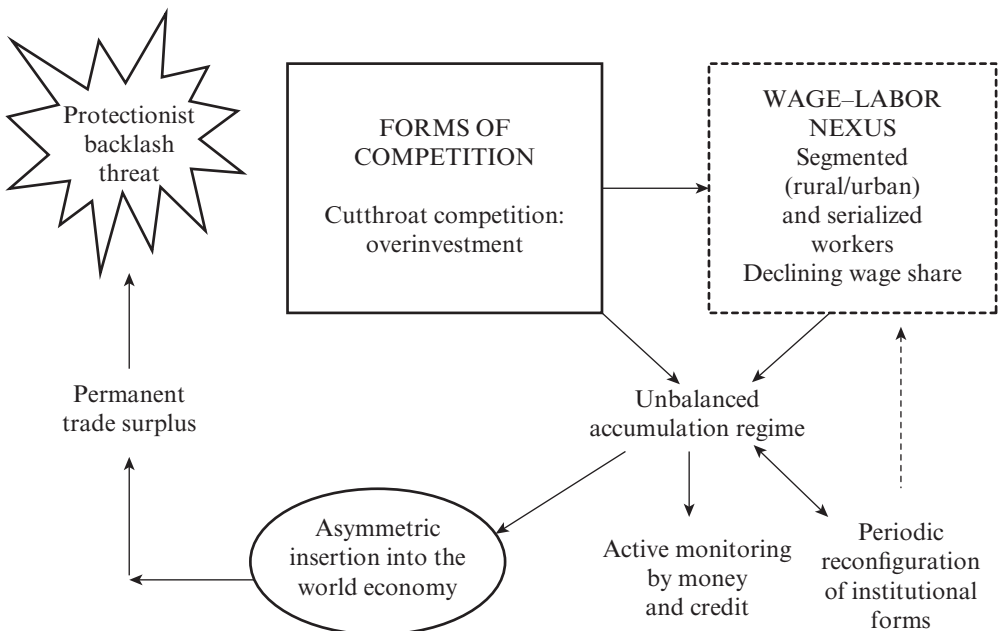


Figure 20.9 Competition: the hierarchical institutional form in China

labor has been associated with a quasi-continuous decline of the wage share in national income. This might stabilize and halt the decline of the average profit rate, but it does not reduce the gap between production capacities and aggregate demand. Furthermore, the difficulty of access to credit by private firms is inducing cash flow-driven investment, whereas the poor public welfare system (unemployment benefits, healthcare and housing) is an incentive for building strong household savings that are a response to the uncertainties faced by families and individuals over the life cycle. The rise and permanence of the Chinese trade surplus over more than a decade is the expression of this unbalanced domestic accumulation regime. In other words, contemporary China is an outstanding example of the hierarchical domination of competition, both at home and at the world level.

To sum up, the diversity of political intermediation across continents and countries does add to the differentiation of constructed or inherited endowments to explain a significant heterogeneity of the modes of development. Can some key configurations observed in the past and today be diagnosed?

A PANORAMA OF PAST AND CONTEMPORARY MODES OF DEVELOPMENT

One of the contributions of modern institutional theory is showing that the various capitalisms are not totally idiosyncratic to each national entity, since they seem to belong to a limited number of broad categories (Hall and Soskice 2001; Amable 2004; Harada and Tohyama 2011). An equivalent effort is initiated here for development modes. A convenient classification relies upon the nature of the sources in the cohesion of development modes (Table 20.2).

Three Models Based upon Institutional Hierarchy: Rentier, Export-Led and Inward-Looking

All the economies that depend upon the exploitation of natural resources clearly display common features in the sphere of institutional architecture: that is, the domination of an appropriation regime and its exploitation at the world level. The monetary regime is built upon the inflow of international currency generated by the export of these natural resources that are also the main contribution to public finance and thus government spending. Consequently, in rentier development models, the wage-labor nexus is secondary because the productive system's growth is hindered by the easiness of importing the goods sustaining the domestic way of life of the elite and middle class. Polity and economy tend to be confused within the same oligarchic power, hence wide inequality is observed in the absence of popular protest. Venezuela, Algeria, Saudi Arabia and Russia are examples of such socio-political regimes, not very democratic indeed, that prosper when the industrialized countries are booming, but are crisis-prone when world trade slows down (Table 20.3).

A second mode also displays the hierarchical domination of one institutional form: the integration into the world economy is typical of an industrial export-led configuration where the necessity to cope with international competition sets the tune for a

Table 20.3 *A synoptic view of some development modes*

Features	Institutional forms				Viability of the mode of development		Emblematic cases
	Compatible	Complementary	Dominant	Dominated	Economic	Political	
Modes of developments							
1. Natural resource-based or rentier			<ul style="list-style-type: none"> • Appropriation regime • Integration into the world economy 	<ul style="list-style-type: none"> • Tax system • Monetary regime • Wage-labor nexus 	<ul style="list-style-type: none"> • Structural instability 	<ul style="list-style-type: none"> • Large and stable inequalities 	<ul style="list-style-type: none"> • Venezuela (1950–) • Algeria (1962–) • Saudi Arabia (1950–) • Russia (1990–)
2. Import substitution Industrialization	<ul style="list-style-type: none"> • Monetary policy • Partial institutionalization of the wage-labor nexus 	<ul style="list-style-type: none"> • Protection of domestic market • Redistribution by the state • Oligopolistic competition 			<ul style="list-style-type: none"> • Declining efficiency of import substitution 	<ul style="list-style-type: none"> • Political instability 	<ul style="list-style-type: none"> • Argentina (1950–1976) • Brazil (1950–2002)
3. Industrial export-led			<ul style="list-style-type: none"> • Free-trade treaty • Light state • Competition 	<ul style="list-style-type: none"> • Competitive • Wage-labor nexus • Monetary policy 	<ul style="list-style-type: none"> • Coping with the volatility of the world economy 	<ul style="list-style-type: none"> • Idiosyncratic due to different hegemonic blocks 	<ul style="list-style-type: none"> • Taiwan (1970–) • Mexico after North American Free Trade Agreement (NAFTA)

Table 20.3 (continued)

Features	Institutional forms				Viability of the mode of development		Emblematic cases
	Compatible	Complementary	Dominant	Dominated	Economic	Political	
Modes of development							
4. Inward-looking							
4.1 Typical			<ul style="list-style-type: none"> • Significant protection • Oligopolistic competition • Strategic state 	<ul style="list-style-type: none"> • Agriculture and peasants • Monetary policy 	<ul style="list-style-type: none"> • Large productive heterogeneity 	<ul style="list-style-type: none"> • Recurring conflicts but positive role of democracy 	<ul style="list-style-type: none"> • India (1950–1989)
4.2 Mixed (export- and investment-led)	<ul style="list-style-type: none"> • Limited public budget • Balkanized wage labor nexus 	<ul style="list-style-type: none"> • Opening to world trade • Harsh domestic competition • State control of credit and exchange rate 			<ul style="list-style-type: none"> • The legacy of the competition led development is an obstacle 	<ul style="list-style-type: none"> • Built in inequality between rural and urban populations 	<ul style="list-style-type: none"> • China (2003–)
4.3 Based upon social inclusion and inequality reduction	<ul style="list-style-type: none"> • Oligopolistic competition • Integration into the world economy 	<ul style="list-style-type: none"> • Institutionalization of wage-labor nexus • Emerging welfare • National productive system 			<ul style="list-style-type: none"> • If sufficient dynamism of national production 	<ul style="list-style-type: none"> • Significant legitimacy 	<ul style="list-style-type: none"> • Brazil (2003–2013)

pro-business lean state and a highly flexible wage–labor nexus, in response to the search for price-competitiveness. Contrary to rentier regimes, the exchange rate regime is decided according to the defence of the domestic industrial system. This development mode displays different variants according to the composition of each domestic hegemonic bloc, quite different in Taiwan or in Mexico. Nevertheless, both have to respond to the ups and downs of international demand, either by the technological upgrading of the industrial specialization or by an adjustment of a segmented wage–labor nexus and the size of informality.

Contrary to a widely held conception, inward-looking development modes are not totally over with and replaced by export-led ones. This is still a rather reasonable strategy, opened to continental economies that potentially at least may aim at a coherent and efficient division of labor within their frontiers, given the size of their population and the more urgent social needs to be fulfilled. A strategic state may organize a protection of the domestic market and thus synchronize a progressive productive modernization along with the emergence of a middle class. A modicum of welfare may emerge to protect the less privileged, especially poor peasants and rural distressed communities. In the contemporary world this is an option available to India, China and to some extent Brazil. Nevertheless the more emblematic example is probably the Indian trajectory from 1950 to 1989. The major challenge addressed to policy-makers is how to deal with a large productive and social heterogeneity, and in this respect the political regime – let it be authoritarian, oligarchic or democratic – is crucial for overcoming the recurring conflicts and contradictions of this mode of development.

Three other Modes Organized around Complementarity: Import Substitution, Mixed and Based upon Social Inclusion

A second series of configurations results from the *ex post* complementarity or even simple compatibility of the institutional forms via a process of learning and/or selection of strategies. The import substitution industrialization (ISI) assembles a protection of the domestic market, a form of industrial policy via a redistribution through subsidies and the tax system. Consequently, oligopolies or monopolies prevail in most sectors. A specific wage–labor nexus is organized in the manufacturing industry, but it rarely diffuses to the rest of the economy. The monetary and credit regime is either compatible, or at worst destabilizing when the government tries to relaunch import substitution from consumer goods to equipment and components, the efficiency of which is declining. Historically, the Latin American trajectories (Argentina and Brazil, for instance) suggest that these economic limits recurrently have translated themselves into political instability episodes, at least before the transition to more democratic constitutions.

Frequently, export-led development and ISI are conceived as antagonists since the former is supposed to sequentially follow the latter; most Latin American countries are examples of this pattern. Nevertheless, China since 2003 has explored a successful hybridization of both strategies: domestic firms and multinational transplants contribute to the dynamism of export, but simultaneously the boom of investment and infrastructure enhances Chinese production and innovation capabilities. This has been made possible by the complementarity between an asymmetric integration into the world economy (control of capital inflows, access to US and European markets, *de facto* barriers to

Chinese markets) and the control by the state over credit allocation and the exchange rate. This is the outcome of a highly specific institutional form: the acute competition among a series of local-state corporatism that pursues a mix of both political and economic objectives through high-speed growth. Nevertheless the primacy of competition makes the transition difficult towards a typical inward-looking development, the official objective of the Chinese Communist Party. Furthermore, poverty has been drastically reduced, but inequalities have exploded, and this is a serious challenge to social stability and the long-term political legitimacy of the regime.

There is a third, inward-looking variant that is a hybridization of an ISI and a rentier regime: Brazil. It is an example of a strategy aiming at converting agricultural and mineral resources rents into a process of industrialization during the period 1950–2002, but afterwards democratization allows a reorientation towards a more inclusive growth and a reduction of inequality. This new model relies upon the complementarity between a significant, if not complete, institutionalization of the wage–labor nexus, an emerging welfare system and a relatively strong productive system. The integration into the world economy puts some limits on the deepening of the model, since the evolution of the exchange rate may enter in contradiction with this development mode built upon a better social inclusion via income inequality reduction: a cumulative external trade deficit then expresses the lag in production capacities in response to the rise in domestic demand. This is the present economic limit of this quite rewarding strategy in terms of political legitimacy. Finally, middle-class social movements may ask for more public services of better quality, and bring another tension into this emblematic case of a new developmental strategy.

FROM OLD TO NEW THEORIES OF DEVELOPMENT

It is time to conclude this presentation of the contribution of *régulation* research to the understanding of past and present development and explain how it relates to other theorizing.

An Epistemological Convergence with Latin American Structuralism

A brief retrospective back to the works of Raul Prebisch (1950, 1971, 1981) shows that they can still help to inform development strategies despite the major changes since then (Ferrer 2011), and suggests the existence of some affiliation between structuralist and *régulation* theories (Table 20.4).

First and foremost, the structuralist approach emerged during the great interwar crisis period that marks the inadequacy of simply importing economic theories elaborated for the industrialized core economies to understand the specific problems of Latin American underdevelopment: technological dependence, volatility of economic activity, unequal growth – all factors related to an unfavorable integration into the global economy that caused the deterioration of terms of trade between raw materials and manufacturing products. Therefore the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) aimed to produce an indigenous theory that takes account of these distinctive features. The analogy is striking with the emergence of *régulation* theory

Table 20.4 A comparison of old and new development theories

Theory Features	ECLAC structuralism	Keynesian and post-Keynesian	New development	Régulation
1. Epistemology / methodology	Theories are locally and historically situated	A general theory but diversity of applied models	Redesign of the theory for middle-income countries in the era of financial globalization	Theories are born local and historical and become general by systematic comparisons
2. Core concepts	Dependent Growth with social exclusion Terms of trade model of import substitution	Effective demand Balance-of-payments constraint Income distribution Economic policy	Competitive exchange rate regime Dutch Disease Active state Sound public finance	Institutional forms <i>Régulation</i> modes Accumulation regime Cyclical/structural crises
3. Conception of time	Historical	More cinematic than historical	Understanding the divergent trajectories of Latin America and Asia	Theories are reflecting history, history is not the outcome of pure theory
4. Possibility, nature and theory of crises	Decisive role of the 1930 crisis in the genesis of ECLAC structuralism	Large involuntary unemployment Stagnation Macroeconomic volatility	Consequence of policy mistakes and/or adherence to the Washington Consensus	Crucial distinction between cyclical crisis within a <i>régulation</i> mode and breaking down of a development mode
5. Latin America specificities	Starting point of the theory: Rentier regime Dependency Social exclusion	Negative impact of inequality on growth Extreme macroeconomic volatility Recurring balance-of-payment crises	Persistence of the resource curse Middle-income country underdevelopment trap	The international integration remains the dominant institutional form. The pool of informal work against the institutionalization of the wage-labor nexus

that intended to challenge the Keynesian interpretation of the post-WWII 'Golden Age' of rapid and stable growth: the fine-tuning of fiscal and monetary policy complemented the Fordism based on the synchronization of mass production and mass consumption by an unprecedented institutionalized compromise on the wage-labor nexus.

Secondly, attempts to analyze Latin America and Asia as peripheral Fordism failed because the mass production – present in Brazil and Argentina, at least during Peronism – did not go along with a wage compromise allowing the development of

mass consumption (Boyer 1994). Hence, there began a process of hybridization of the theory by the Latin American *régulationists*, who have analyzed how their own national basic social relationships define specific accumulation regimes and *régulation* modes that jointly build a mode of development. So, they were faithful to the saying of the French historical school of the Annales: 'Each society experiences the crises of its socio-economic structure.' Therefore, beyond the role of international integration, there was some national autonomy in each domestic institutional configuration, especially in terms of the monetary and exchange rate regime, but also the tax and social security system, against an extreme conception of dependency.

Doubts about the Existence of a Generic Model of Development

On this issue, the *régulation* research agenda differs from the Keynesian and post-Keynesian ones. Indeed, as the first approach emphasizes national and largely idiosyncratic patterns of development, the latter puts forward a generic model in which economic institutions have no role, the crucial factor being the orientation of economic policies. Though technically *régulationist* models adopt the principle of effective demand, it is then combined with an analysis of institutional mechanisms that determine the type of wage formation, the type of competition and the choice of exchange rate regime. Therefore the likelihood of a general model for development seems quite low, unless one accepts the possibility of a multiplicity of regimes, as contemplated by the now forgotten disequilibrium theory (Benassy et al. 1978).

Nevertheless, the disagreement with neoclassical theory is still wider for the reasons mentioned earlier: markets are not the unique coordinating mechanisms, and these other arrangements (Figure 20.3) generally play a crucial role in orientation towards development or a persisting underdevelopment. The liberalization policies of product, labor and finance in Latin America have eroded the past institutional architecture, but they generated such instability and recurring major crises that the governments, whatever their ideological orientations, have been constrained to re-institutionalize some other rules of the game in order to monitor and control market competition (Inter-American Development Bank 1995).

Towards a Political Economy of New Development Modes

But are these precisely the conditions that favor the emergence of a new theory of development (Bresser-Pereira 2009)? By comparing Asia and Latin America, it intends to identify the key factors allowing the establishment of a viable mode of development that would take full account of the consequences of financial globalization. This theory applies only to countries that have already forged the basic institutions of capitalism – this is not the case in most African countries – and that enjoy an intermediate middle income per capita, in contrast to the universal vocation of the past Washington Consensus model. It appears that the possibility of implementing an adequate exchange rate regime is crucial since it is the variable that determines both the industrial competitiveness and the income distribution between exposed and sheltered sectors. One form or another of control over speculative capital movements is necessary to prevent the exchange rate from deviating from the level that warrants the viability and competitiveness of the productive

sector. Ideally, wages should follow productivity, both to maintain competitiveness and to allow domestic demand growth. Finally, the development cannot be driven by cumulative and permanent deficits because they are not a substitute for an industrial and technological policy in due form. A redistributive and robust tax system is another condition for the establishment of such a mode of development that should contribute to reducing inequalities, the Achilles heel of Latin American economies (Damill and Frenkel 2012; ECLAC 2013).

This points to a possible convergence with *régulation* theory since this new development strategy recognizes the importance of building an adequate institutional architecture. The specificity of the first approach is then to emphasize the role of institutionalized compromises and political alliances, to take into account the impact of representations and assign a major role to structural crises in the emergence of new modes of development. The contrasted evolutions of Asia and Latin America and the differentiation trajectories within the same region (China and India on one side; Argentina, Brazil and Mexico, for instance, on the other) suggest the resilience of the nation-state: it is still the space where political alliances and institutionalized compromises continue to be forged, at the very epoch of internationalization and financial globalization.

CONCLUSION

The previous analyses converge towards the following diagnosis about the present state of development theory and the contribution of *régulation* approaches. Since its creation, the domain of development has experienced a co-evolution of both theorizing and strategies followed by governments (Aoki et al. 1998). Much evidence suggests that the present decade is seeing a major bifurcation. On one side, the normative market-centered model has failed to generate a smooth transition to development and stable international relations, since recurring crises in Latin America, Asia and finally the United States and the European Union (EU) have called for a return of state interventions and reforms to restore macroeconomic stability. The dominant theory has been falsified, but no alternative has yet emerged. On the other side, the rise of Asia under the impulse of India and China has yet to be understood and theorized, since quite diverse and often contradictory arguments are put forward and the 'emerging countries' are far from following the same pattern in their development.

For half a century the bulk of research had the objective to detect the major factor that made the difference between developed and underdeveloped societies. Each school or author had their own culprit, be it insufficient capital, lack of entrepreneurs, low education, administered prices, bad governance, corruption or, finally, the poor empowerment of individuals or the destruction of the environment. This search for a mono-causal factor making economies deviate from a better static equilibrium might be a starting point, but is not the end of the analysis. Basically development is a dynamic process that requires a systemic approach mixing most of the factors previously mentioned. It is highly likely that no single general model can transcend the basic heterogeneity of national trajectories.

Régulation theory explores an institutional variant of such a dynamic and systemic paradigm. It is built upon the concept of institutional form, defined as the codification

of core social relations, and it organizes the two-sided relations between macro regimes and individuals' behaviors. Relations of appropriation of rents, relations of production, degree and nature of competition, forms of integration into international relations, nature of state interventions and access to credit are the basic institutional forms that characterize modern societies. Most of them are the outcome of social conflicts leading to local or partial institutional compromises. Their combination may or may not deliver a viable development pattern. Thus this analytical framework, when confronted by an empirical investigation for a given society and period, is able to explain both failures and successes of development.

Two conditions have to be fulfilled for a viable development mode. First, the combination of the key institutional forms has to sustain the economic reproduction via the ability to monitor an accumulation regime for industrial-led countries or an extraction regime for primary-resource-based economies. Nevertheless, economic coherence is a necessary but not a sufficient condition. The second condition relates to the political sphere: is there an implicit or explicit hegemonic bloc able to legitimize or alternatively impose the distribution of power implied by and embedded into the ongoing institutional architecture? In many instances political alliances might imply less efficient economic outcomes than are potentially accessible in the light of economic analysis: *régulation* theory proposes a political economy of development.

Contemporary new classical macroeconomics is built upon the strong hypothesis of a long-term stable equilibrium, moved only by exogenous shocks. Such a vision is frequently imported into models formalizing development. In fact, economic history shows that no development mode can last forever. This can be captured by taking into account two time scales: the short and medium term of recurring business cycles, and the long run when the progressive transformation of techniques, organizations, institutions, social values and political alliances endogenously pushes the economic into a zone of structural instability. This is a distinctive feature of *régulation* theory: the study of structural crises of previously successful socio-economic regimes is the necessary complement to the analysis of their emergence and maturation.

This approach makes the existence of a generic model capturing the features of all past and present development modes quite unlikely. Most institutional forms are idiosyncratic, and their combination may exhibit various complementarities or hierarchies among them. Nevertheless, comparative studies on Latin America and Asia conclude that there is a limited number of institutional configurations that are common to groups of countries: the coexistence of diverse development modes at a given period is a major feature that invalidates most of the recommendations of international organizations based upon the vision of 'one best way'. In economic terms, one may detect resource-based rentier regimes, typical industrial export-led ones, but inward-looking development modes are not over with, especially for large continental economies such as India or China. Last but not least, Brazil is exploring another mode, relying on the cumulative reduction of income inequality to foster a domestic demand-led development.

This structural and institutional theorizing calls for a renewed approach to international relations. There is no such thing as 'the representative developing economy': the inability of the BRICS and other emerging economies to defend a common proposal for the redesign of the international relations is striking evidence. For instance, macro-economic activity is now closely correlated between China and Brazil, but their govern-

ments disagree upon the need for stabilizing or not the terms of trade between industrial goods and natural resources. However diverse the development modes might be, they are more and more interdependent, and this makes the world economy more uncertain. In the long run this could be a major obstacle to development for all the governments that have decided to base their strategies upon extensive opening to world trade and finance.

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21. The dependency school and its aftermath: why Latin America's critical thinking switched from one type of absolute certainties to another

*José Gabriel Palma**

Domination is more effective if it delegates the . . . violence on which it rests to the dominated.
(Theodor Adorno 1974)

We welcome illusions because they spare us emotional distress . . . We must not complain then, if now and again they come into collision with some portion of reality and are shattered against it. (Sigmund Freud 1908)

In reality our fellow-citizens have not sunk so low as we feared, because they had never risen so high as we believed. (Sigmund Freud 1908)

INTRODUCTION: THE LATIN AMERICAN CRITICAL TRADITION IN POLITICAL ECONOMY

Discussing Say's Law, Keynes once said that Ricardo had conquered England as completely as the Holy Inquisition conquered Spain. Something similar has happened in post-1980 Latin America (LA), where neoliberalism has conquered the region, including most of its progressive intelligentsia, just as completely (and just as fiercely) as the Holy Inquisition conquered Spain. In fact, this process has been so successful that it has actually had the effect of closing the imagination to conceptualizing feasible alternatives. As a result, not even the (relatively small) Latin American left that has so far resisted the neoliberal tsunami has been able to generate a new (post-structuralism or post-dependency) tradition of critical thought. Hence, the neoliberal slogan 'there is no alternative' (TINA) has become one of the most effective self-fulfilling prophecies of all time.

LA is a region whose critical social imagination has stalled, changing from a uniquely prolific period during the 1950s and 1960s to an intellectually barren one since the death of Allende, the appointment of Paul Volcker at the Federal Reserve (Fed), the election of Thatcher and Reagan, the 1982 debt crisis and the fall of the Berlin Wall. Of course, it could be argued that what happened in LA is not really that different from what has

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happened in the rest of the world post-1980, both developed and developing. One could even argue that (despite recent sparks of interest in an ever more obscene inequality),¹ the recent demise of critical thinking has spread around the world almost as a pandemic, transforming critical thinkers into an endangered species (see Arantes 2007). However, in LA the downswing of this cycle of critical thinking seems to have been particularly pronounced. These phenomena bring to light issues related to what may be needed for the sustainability of intellectual traditions, and in particular of their capacity for continuous critical thinking.

The emergence in LA after World War II of a creative intellectual tradition in the social sciences somehow runs against what one could call the 'Iberian tradition'. This tradition has been far more creative in painting, sculpture, music, theatre, literature and film than in its contributions to the social sciences. Basically, in the Iberian Peninsula and in LA social sciences have suffered as a result of a lack of 'enlightenment' beyond the arts and letters and, more specifically, because of the lack of sophistication in the exercise of power by the state. Here the ideas of Foucault are crucial to an understanding of this issue. One of Foucault's main points in this respect was that knowledge and power are interrelated, one presupposing the other (see Foucault 1980). Aside from its philosophical dimension, Foucault's idea intended to show how the development of social sciences was interrelated with the deployment of 'modern' forms of power. These needed to be exercised with a much more fine-grained knowledge of society and of forms of domination. The modern state required the development of the social sciences to find more sophisticated forms of disciplining individuals and groups; that is, more sophisticated forms of knowledge were required for more sophisticated technologies of power.²

In the 'Iberian world', since states have often governed through remarkably 'un-modern' means, and at times via crudely mediated forms, they have required a much lower level of development of the social knowledge and less sophistication in their forms of control. And as these states have had no objective necessity for the advancement of this knowledge, they have not developed the institutions that were necessary for acquiring it; as a result, social sciences have been relegated to a relatively marginalized academic enterprise. In other words, the Iberian world, lacking the objective incentives, has not generated in its social sciences the remarkable creativity found (in its past and present) in its paintings, sculptures, music, theatre, literature or films.³ As in the past the 'Siglo de Oro', with its flourishing arts and literature, had no counterpart in the social sciences, the recent past is no exception. Basically, where is the Picasso of Ibero-American economics? The García Lorca of its political sciences? The García Márquez of its sociology? The César Vallejo of its economic history? The Almodóvar of its social anthropology? The Fernando Pessoa of its human geography? The Frida Kahlo of its social psychology? Or the Neruda of its political philosophy?

Another (complementary) input to the understanding of the lack of development of LA's social sciences is revealed by Ortega y Gasset. He once referred to LA's 'narcissistic

¹ See especially Piketty (2014); see also Palma (2016).

² For a discussion of Foucault's ideas in the context of the Arab world, see Frangie (2008).

³ Another Ibero-American cultural forte is law. Given the importance of a rather inefficient administrative apparatus, the omnipresence of law professionals, and the channelling of much political and policy debate through legal and constitutional debates and reforms has been another trait of Ibero-American culture.

tendency to use reality as a mirror for self-contemplation, rather than as a subject for critical analysis and progress' (Ortega y Gasset 1918). He also observed that in LA he found too many 'self-satisfied individuals', reminding us that 'human history is the product of discontent' (ibid.). Not surprisingly, these regional characteristics have not been very conducive to the development of the social sciences.

A very good example of this (not very creative) attitude in the social sciences – the use of reality as a mirror for self-contemplation – is provided by a good deal of mainstream economics in the region. Another example of this attitude is given by the well-known fact that in LA individuals are often more interested in wealth as a means to demonstrate publicly their personal status, and as a sign of power and influence, rather than as a means of capitalist-type accumulation and transformation (*à la* Schumpeter); this phenomenon has been an important fetter on the economic development of the region.

In fact, a crucial contribution to the unusual dynamism after the Second World War of LA's social sciences was the impact of a non-Iberian European immigration. This immigration was in general different from previous ones in that it comprised a large number of intellectuals, including many Jewish academics escaping Nazi persecution. Another input was given by members of second- or third-generation immigrant families from the Axis powers – particularly Italians – who (probably disgusted by the obscenities of fascism), instead of 'joining the family business', chose a life of intellectual work. Some cumulative causation was probably also at play, where (as opposed to what is happening today) a vibrant intellectual life of the critical thinking type generated powerful pull factors. Finally, another crucial contribution was provided by the rise in many countries of a more endogenous *mestizo* class, struggling to transform white-Iberian dominated pre-capitalist societies. The writings of Mariátegui probably best reflect this phenomenon (see Mariátegui 1928). His main message was that a socialist revolution should evolve organically on the basis of local conditions and practices, not as the result of mechanically applying European formulae. This, of course, is also extremely relevant to the issue of the sustainability of an intellectual tradition. As will be argued below, the lack of sufficiently strong endogenous roots in Latin American critical thinking explains in part why it moved so easily in tandem with ideological and political changes elsewhere, particularly in Western and Eastern Europe.

THE EMERGENCE OF STRUCTURALISM AND DEPENDENCY ANALYSES

After World War II, the Latin American critical tradition in the social sciences revolved around two axes: structuralism and 'dependency analyses'. Although there was an important degree of diversity in them, one crucial characteristic of these intellectual traditions was that they were associated with a growing regional consciousness of 'underdevelopment'; that is, a growing realization that from an evolutionary point of view, LA was not progressing along the expected developmental path that would bring the countries of the region closer to the socio-political and economic structures of more industrialized countries. So, the general feeling was that instead of properly 'catching up', LA was getting increasingly trapped in a sort of evolutionary blind alley. For structuralists, to escape this fate what was needed was to engineer a very specific set of

structural changes in the economies of the region that would help to revitalize them by fostering those economic activities with the externalities and the spillover effects needed to set in motion processes of cumulative causation that would take advantage of dynamic economies of scale, increasing returns and so on. And for dependentistas, instead, what was needed was to turn LA politically in a radically new direction. That is, structuralists called for a new economic structure, with a leading role for the state and the emerging industrial bourgeoisie in how to get there, while dependentistas called for a new form of agency in the form of a more radical and visionary political leadership from the left.⁴

However, as already mentioned, an important characteristic of these new critical traditions was that those most involved in them were rather semi-detached from endogenous socio-political movements and organizations. In fact, it is no accident that one of its most creative sources (structuralism) developed, of all places, among United Nations (UN) bureaucrats (the United Nations Economic Commission for Latin America and the Caribbean – ECLAC) and was led by an ex-president of a central bank (Raúl Prebisch), and that in the other (dependency) one of its most influential branches was set in motion by someone recently graduated from, of all places, the Faculty of Economics of the University of Chicago (Andre Gunder Frank). That is, these intellectual traditions, because of their rather superficial rooting in endogenous socio-political movements, did not have many ‘organic intellectuals’ (in a Gramscian sense).

Structuralism — and the economics of ‘Uneven Development’

The main root of Latin American structuralism was French economic structuralism (see Blankenburg et al. 2008). Perroux (1939), for example, who was the main intellectual influence in Furtado’s early work, including his doctoral dissertation at the Sorbonne, defined ‘structural economics’ as the science of the relations characteristic of an economic system (ensemble) situated in time and space. Central to this approach was the view that, over and above the ‘givens’ of neoclassical economics (preferences, resources and technology), the analysis of the evolution of institutions and structures over time had to be at the heart of economic analysis. One of the innovative contributions of Perroux concerns his theory of domination, which became central to ECLAC’s conception of economic systems: rather than being constituted by relationships between equals, the economic world was conceptualized in terms of hidden or explicit relationships of force and power between dominant and dominated entities.

From the very beginning ECLAC’s analysis was structuralist in the sense that it viewed the world economy as a system within which the centre and the periphery were intrinsically related, and that most economic problems of the periphery – such as slow productivity growth, stop-go macroeconomics, inflation and unemployment – were associated to the specific economic structure that emerged from that interaction; one that was characterized mostly by a weak manufacturing sector and a backward agriculture for

⁴ Those who made influential contributions in the structuralist camp include (among many others) Ahumada, Bacha, Díaz-Alejandro, Fajnzylber, French-Davis, Furtado, Noyola, Pinto, Prebisch, Rodríguez, Sunkel and Urquidí; while in dependency analyses they include (again, among many others) Caputo, Cardoso, Dos Santos, Faletto, Hinkelammert, Laclau, Lessa, Marini, Pizarro, Serra and Tavares.

the domestic market. ECLAC's analysis was also structuralist in the sense that it tried to focus on underlying structures and relationships, as opposed to epiphenomena.

The hub on which the whole of ECLAC's analysis of underdevelopment turned was the idea that the structure of production in the centre and in the periphery differed substantially. That of the centre was seen as homogeneous and diversified; that of the periphery, in contrast, as heterogeneous and specialized. Heterogeneous because economic activities with significant differences in productivity existed side by side, with the two extremes provided by a 'modern' export sector, and a subsistence agriculture. Specialized because the export sector, which is concentrated upon a few unprocessed primary products, represented a high proportion of gross domestic product (GDP) and had very limited backward and forward linkages with the rest of the economy. It was this structural difference that lay behind the different function of each pole in the international division of labour; and within this framework there were few (if any) endogenous forces in the periphery that might in time have led its structure of production to become more homogenous and diversified – that is, one with both a more dynamic manufacturing sector and a more vibrant domestic agriculture.⁵ Thus the interrelationship between centre and periphery could not be understood in static terms since it was part of a single system, dynamic by its very nature.⁶

The nucleus of ECLAC analysis was the critique of the conventional theory of international trade, as expressed in the Heckscher–Ohlin version of Ricardo's theory of comparative advantages. It aimed to show that the international division of labour, which conventional theory claimed to be 'naturally' produced by comparative advantages, was of much greater benefit to the industrial centre than to the commodity-exporting periphery; that is, in these matters, the 'invisible hand' was neither invisible nor even-handed.⁷ From this starting point, ECLAC analyses identified three structural tendencies which are considered inherent to the development of the periphery: unemployment, external disequilibrium and the tendency towards deterioration of the terms of trade (see especially Rodríguez 2006).

First, due to structural heterogeneity, ECLAC argued that full employment of the labour force could only be achieved if the rate of capital accumulation in the modern sector was sufficient not only to absorb the growth of the active population, but also to reabsorb labour displaced from the traditional sector. It is from this heavy burden on the modern sector that the structural tendency towards unemployment was originally deduced.

Second, as the structure of production in the periphery was excessively specialized, a substantial proportion of the demand for manufactured products had to be oriented towards imports; and given their high income elasticity, imports would tend to grow much faster than national income. The opposite was the case in the centre vis-à-vis its imports

⁵ Perhaps influenced by previous Keynesian analysis of inflation in India, inelastic supplies of agricultural wage-goods were at the core of ECLAC's theory of inflation. See Noyola (1957), Sunkel (1960), Seers (1962) and Pinto (1968).

⁶ For a comprehensive analysis of structuralism, see Rodríguez (2006) and Chapter 11 by Cimoli and Porcile in this *Handbook*; for 'dependency analyses', see Palma (1978). See also Blankenburg et al. (2008), Cardoso (1974), Cardoso and Faletto (1979), ECLAC (1963), Furtado (1970), Palma (2008a) and Taylor (2004).

⁷ For ECLAC, Ricardian international comparative advantages mostly opened up attractive opportunities to technologically advanced economies; something that they were quite happy to exploit (see also Cimoli et al. 2009).

from the periphery, as these consisted essentially of unprocessed primary products, for which income elasticity is usually less than unity. Therefore, the growth of income in the periphery that is sustainable from its balance-of-payments point of view would inevitably be one that is lower than that of the centre (at least in the medium term), and one that is lower in proportion to the degree of the disparity between the respective income elasticities of demand for imports. If the periphery attempted to surpass this limit, it would expose itself to external disequilibrium, stop-go macroeconomics and increasing foreign indebtedness. Thus (given its consumption preferences), the only long-term alternative to slow growth and an ever-increasing foreign debt would be a greater effort to satisfy the highly income-elastic demand for manufactured products with domestic production, and to try to diversify exports towards more income-elastic products (*à la* East Asia). In turn, domestic production of these types of goods should set in motion a growth-enhancing process of cumulative causation. Only a proper process of industrialization, and of modernization of agriculture, given these assumptions, could enable the periphery to enjoy a fast (and sustainable) rate of growth of real income, and one that was not so highly constrained by its higher income elasticities of demand for imports.

Third and finally, for ECLAC the tendency towards deteriorating terms of trade and the asymmetries in terms of gains from specialization which it brings with it are a logical analytical deduction from the phenomena of specialization and heterogeneity. The basic problem is the effect of economic growth on the terms of trade. Following the issues discussed above, as the periphery grew, both its consumption and the production paths were (and are today even more) biased towards trade (see Palma 2008a). That is, as incomes grew there was a trend for the proportion of importables in total consumption to increase; and as output grew, the same was the case for the proportion of exportables in domestic production. However, in the centre both the consumption and the production paths would tend to be less biased for trade vis-à-vis the periphery: in the case of the former, low price and low income elasticities for most primary products would be the main reasons; and in the latter, phenomena such as economies of scale would tend to reduce the primary-commodity content in final output. The combined effects of both trends would be a tendency towards a systemic overproduction of primary products. Hence the tendency towards deterioration of the terms of trade of the periphery.

A further component of this phenomenon of asymmetries in terms of gains from specialization was the fact that the periphery exported 'homogeneous' products (commodities that are normally sold in spot markets), while the centre exported 'heterogeneous' ones, from which all sort of rents could be extracted both in the product and in the factor markets.

In sum, the key idea of structuralism was that supply curves in the periphery had the 'wrong elasticities': they were highly elastic where this was not necessarily to its advantage (exports of unprocessed commodities), and they were inelastic where high elasticities would have been greatly beneficial for sustainable growth and low inflation (manufacturing, including the processing of commodities, and agricultural production of wage-goods).⁸

⁸ Many have misunderstood this, arguing that structuralism was just about the latter part of the asymmetry; that is, just about supply inelasticities. See, for example, Little (1984).

However, according to ECLAC – and as opposed to the current gloom of the ‘resource curse’ brigade, and of so many related ‘pessimistic’ hypotheses – commodity-rich countries could escape from these asymmetries through a process of structural transformation of their economies. The central element in this was a process of industrialization, which would require a faster rate of accumulation, higher domestic production of income-elastic importables and (eventually) more income- and price-elastic exportables including commodities with manufacturing value added. But this process could not be expected to take place spontaneously, for it would be inhibited by both the international division of labour which the centre would attempt to impose, and by a series of structural obstacles internal to the peripheral economies. Consequently, what was needed was a process of vigorous state-led industrialization, and a rapid modernization of domestic agriculture (by, for example, a process of land redistribution).

The limits of economic structuralism: the politics of ‘uneven development’

The dimensions of ECLAC’s thought were based not only upon its structuralist nature, but also upon its breadth and internal unity. Nevertheless, it is also in this structuralist nature that the limitations of ECLAC thought lie. ECLAC proposed an ideal model of sectoral growth designed in such a way that the three structural tendencies identified by their analyses (unemployment, external disequilibrium and the tendency towards deterioration of the terms of trade) could be avoided. From this was derived the necessary conditions of accumulation to allow the required transformation of the different sectors of material production. However, this type of structuralist approach is insufficient for the analysis of the evolution of the system as a whole, as it clearly involves more than the transformation of the structure of production in one of its poles. The theories of ECLAC examined certain aspects of the development of the forces of production (to the extent that they deal with labour productivity and the degree of diversification and homogeneity of the structures of production), but did not touch on social relations of production or the nature of the state, and nor, as a result, on the manner in which they interact.

It is not particularly surprising that ECLAC should have attracted its share of criticism, particularly as it went beyond purely theoretical analysis to offer a package of concrete heterodox policy recommendations. From the right the reaction was immediate and at times ferocious: ECLAC’s policy recommendations were totally heretical and threatened the interests of powerful domestic and foreign groups. ECLAC was also criticized from sections of the left for failing to denounce sufficiently the mechanisms of exploitation within the capitalist system and for criticizing the conventional theory of international trade only from ‘within’.

ECLAC analysis re-emerged in academic circles in the 1980s as an attempt to re-examine (and formalize) some of the traditional structuralist hypotheses from the perspective of modern economics (see the papers collected in Sunkel 1993; and, especially, Taylor 2004). Although this new approach did make significant contributions to macro-economics and development economics, it has not succeeded in introducing structuralism as a new method of enquiry into contemporary mainstream economic analysis.

Dependency

Dependency theories emerged in the early 1960s as attempts to radically transform both ECLAC-type structuralist and Seventh World Congress of the Comintern-type Marxist thinking about the obstacles facing capitalist development in the periphery (see Palma 1978). There can be little doubt that the Cuban Revolution was the turning point. This new approach argued mostly against both the necessity and the feasibility of capitalism in LA (and in the periphery in general). Consequently, it also argued against the politics of the 'popular fronts', and in favour of attempting an immediate transition towards socialism.⁹

The pre-dependency, pre-Cuban Revolution Marxist approach saw capitalism in the periphery as still historically progressive, but argued that the necessary 'bourgeois-democratic' revolution was being inhibited by a new alliance between the two main enemies of progress and transformation: imperialism and the traditional elites. The bourgeois-democratic revolution was understood as the revolt of the emerging forces of production against the old pre-capitalist relations of production. The principal battle-line in this revolution was supposed to be between the rising industrial bourgeoisie and the traditional oligarchies; that is, between industry and land, capitalism and pre-capitalist forms of monopoly and privilege. Because it was the result of the pressure of a rising class whose path was being blocked in economic and political terms, this revolution would bring not only political emancipation but economic progress, too.

Therefore, this pre-dependency Marxist approach identified imperialism as the main enemy: in one way or another, the omnipresent explanation of every social and ideological process that occurred. The principal target in the struggle was therefore unmistakable: North American imperialism. The allied camp for this fight, on the same reasoning, was also clear: it comprised everyone, except those internal groups allied with imperialism (the traditional oligarchies). Thus, the anti-imperialist struggle was at the same time a struggle for capitalist emancipation and rapid industrialization. The local state and the 'national' bourgeoisie appeared as the potential leading agents for capitalist development, which in turn was still viewed as a necessary stage towards socialism.

The post-Cuban Revolution Marxist analysis began to question the very essence of this approach, insisting that the local bourgeoisies in the periphery no longer existed as a 'progressive' social force but had become '*lumpen*', incapable of meaningful productive accumulation or rational political activity, dilapidated by their consumerism and blind to their own long-term interest. It is within this framework that the main branch of 'dependency' appeared on the scene. At the same time, both inside and outside of ECLAC there began to develop the other two major approaches to this analysis.

The analytics of dependency studies

The general focus of all 'dependency' analyses is the study of the (supposedly intractable) obstacles to capitalist development in the periphery from the point of view of the interplay between 'internal' and 'external' structures. However, this interplay was

⁹ Broad popular fronts emerged from the anti-fascist struggles favoured by the Seventh Congress of the Comintern.

analysed in several different ways. With the necessary degree of simplification that every classification of intellectual tendencies entails, I would distinguish between three major approaches in dependency analysis (not mutually exclusive from the point of view of their intellectual history). First is the approach begun by Baran, Sweezy and Frank; its essential characteristic being that dependency was seen as causally linked to permanent capitalist underdevelopment (see Baran 1957; Baran and Sweezy 1966; Frank 1967). The second approach is associated with one branch of the ECLAC structuralist school, especially Furtado, Pinto and Sunkel. These writers sought to reformulate the classical ECLAC analysis from the perspective of a critique of the obstacles to 'national' development (see ECLAC 1963). The third and final approach tried (but seldom succeeded) to explicitly avoid the formulation of mechanico-formal theories of underdevelopment based on its 'dependent' character, concentrating instead on what was called the study of 'concrete situations of dependency'. In the words of Fernando Henrique Cardoso:

The question which we should ask ourselves is why, it being obvious that the capitalist economy tends towards a growing internationalization, that societies are divided into antagonistic classes, and that the particular is to a certain extent conditioned by the general, with those premises we have not gone beyond the partial – and therefore abstract in the Marxist sense – characterization of the Latin American situation and historical process. (Cardoso 1974, 326–327, my translation)

Dependency as a theory of the inevitability of capitalist underdevelopment The father of this approach to dependency was unquestionably Paul Baran. His principal contribution (Baran 1957) took up the view of the Sixth Congress of the Comintern regarding the supposedly irresolvable nature of the contradictions between the economic and political needs of imperialism, and those of the process of industrialization and development of the periphery. To defend its interests, international monopoly capital would form successful alliances with pre-capitalist domestic oligarchies intended to block progressive capitalist transformation, in order to have continuous easy access to cheap peripheral resources. The traditional elites, in turn, would be able to maintain traditional modes of surplus extraction and monopoly on power. Within this context the possibilities for economic growth were extremely limited, as the surplus was largely expropriated by foreign capital, or otherwise squandered by traditional oligarchies. The only way out was political. At a very premature stage, capitalism – as it had actually evolved in the periphery – had become a fetter on the development of the productive forces and, therefore, its historical role had been successfully blocked and had already come to an early end.

Starting out with Baran's analysis, Frank attempted to prove the thesis that the only solution was a revolution of an immediately socialist character (see Frank 1967). However, Frank never even bothered to define what he meant by 'capitalism'; he simply affirmed that, since the periphery was never feudal, and since it had always been incorporated into the world capitalist system, then it must follow that it had been 'capitalist' from the beginning of colonial times. It is not surprising, then, that this analysis leads Frank to displace class relations from the centre of his analysis. Although it is evident that capitalism is a system where production for profits via exchange predominates, the opposite is not necessarily true: the existence of production for profits in the market is not proof of the existence of capitalist relations of production. For Frank, it is a sufficient condition;

thus he develops a circular concept of capitalism. In turn, for him it is capitalism (and nothing else but capitalism), with its metropolis–satellite relations of exploitation, which has produced underdevelopment. The choice was clear: continuing endlessly to underdevelop within this emasculated capitalism, or an immediate move towards a socialist revolution. Under these circumstances, ‘to support the bourgeoisie in its already played-out role on the stage of history is treacherous’ (Frank 1967, xvii).

Basically, I would argue that the theories of dependency examined here are mistaken not only because they do not fit the facts – as capitalism was certainly developing LA’s forces of production at the time (see below) – but also because their mechanico-formal nature renders them both static and ahistorical. Their analytical focus has not been directed to the understanding of how new forms of capitalist development have been marked by a series of specific economic, political and social contradictions. Instead they are directed only to asserting the claim that capitalism had lost, or in fact never had, a historically progressive role in the periphery in all times and places.

Regarding ‘fitting the facts’, as mentioned above, while the authors discussed above were busy writing about the intrinsic incapacity of peripheral-type capitalism to develop the productive forces in LA, productivity per hour worked was growing at a rate that had no precedent in the region, and has had no continuity ever since.

Dependency as a reformulation of ECLAC’s structuralist analysis Towards the middle of the 1960s ECLAC’s structuralist approach suffered a gradual decline. The process of import-substituting industrialization (ISI), although delivering productivity growth and industrialization, seemed to aggravate other problems instead of alleviating them, such as those of the balance of payments. Income distribution was also worsening in several countries, especially Brazil. The problem of unemployment was also growing more acute, in particular as a result of increased rural–urban migration, due to the failure of domestic agriculture to modernize. Industrial production was becoming increasingly concentrated in products typically consumed by the elites and was not having enough ‘ripple effect’ upon other productive sectors, and not many manufactures were exported (see Furtado 1970).

Also, ISI developed an anti-learning bias; most Latin American manufacturing firms had contracts with foreign companies in which they imported the technology but could not change anything; and whenever possible, machinery and parts also had to be imported. Brazil may have already produced 1 million cars in the early 1970s, but there was no Hyundai in sight. Basically, rigid protection and relatively small domestic markets produced incentives towards horizontal diversification; there were more rewards from developing new products than from improving the productivity of what was already developed. In this sense, ISI had not really developed an ‘infant industry’ rationale, in the sense that its logic was not one of temporary protection to help firms get to the frontier and become internationally competitive. In this sense, there was a ‘double play’: the manufacturing industry that emerged from ISI was relatively fragile (which would make it very difficult later for it to adjust to the new post-1980 paradigm), but what was being developed around ISI proved to be growth-enhancing in the long run (see, especially, Pérez 2008).

This apparently gloomy panorama led to substantial ideological changes among many influential ECLAC thinkers, and it strengthened the convictions of the dependency

writers reviewed earlier. The former were faced with the problem of trying to explain some of the unexpected consequences of their policies; the latter tried to deny with the greatest possible vehemence the possibility of any type of dependent capitalist development.

Also, by making a basically ethical distinction between growth and development, ECLAC's dependency analysis followed two separate lines, one concerned with the obstacles to economic growth and the other concerned with the perverse character taken by local 'development'. As suggested before, the fragility of this formulation lies in its inability to distinguish between a socialist critique of capitalism and the analysis of the actual obstacles to capitalist development.

Dependency as a methodology for the analysis of concrete situations of development Briefly, this third approach can be summarized as follows. Firstly, in common with the other two approaches, this one sees LA as an integral part of the world capitalist system, in the context of the increasing internationalization of the system. It also argues that some of the central dynamics of that system lie outside the peripheral economies and that the options open to them are, to a certain extent, limited by the development of the system at the centre. In this way the 'particular', to some extent, is inevitably conditioned by the 'general'. Therefore, a basic element for the analysis of these societies is given by the understanding of the 'general determinants' of the world capitalist system and of its different processes of globalization – which have themselves changed rapidly. The analysis therefore requires an understanding of the contemporary political and economic characteristics of the world capitalist system and of the dynamics of its transformation.

Thus, for example, this approach was quick to grasp the significance of the rise of the multinational corporations in the 1960s, which was progressively transforming centre-periphery relationships. As foreign capital became increasingly directed towards manufacturing industry in the periphery, the struggle for industrialization, which was previously seen as an anti-imperialist struggle, at least in some cases became the goal of foreign capital. Thus dependency and industrialization ceased to be necessarily contradictory processes, and a path of 'dependent development' became clearly possible.

Secondly, this approach tried to enrich the analysis of how developing societies are structured through unequal and antagonistic patterns of social organization, showing the asymmetries and the exploitative character of the system and their relationship with the socio-economic base. This approach has also given importance to the diversity of natural resources, geographic location and so on, thus also extending the analysis of the 'internal determinants' of capitalist development.

However, thirdly, while these characteristics are important, the most significant feature of this approach is that it attempted to go beyond these elements and insisted that from the premises so far outlined one arrives only at a partial, abstract and indeterminate characterization of the historical process in the periphery, which can only be overcome by understanding how the general and specific determinants interact in particular and concrete situations. It is only by understanding the specificity of movement and change in the peripheral societies as a dialectical unity of both these internal and external factors that one can hope to understand the particularity of social, political and economic processes in these societies.

The study of the dynamic of dependent societies as a dialectical unity of internal and external factors implies that the conditioning effect of each on the development of these societies can be separated only by undertaking a static analysis that would have to separate almost metaphysically the two sides of the opposition. Equally, if the internal dynamic of the dependent society is a particular aspect of the general dynamic of the capitalist system, it does not imply that the latter produces concrete effects in the former, but only that it finds concrete expression in that internal dynamic. The system of external domination reappears as an internal phenomenon through the social practices of local groups and classes, who share the interests and values of external forces. Other internal groups and forces oppose this domination, and in the concrete development of these contradictions the specific dynamic of the society is thus generated. It is not a case of seeing one part of the world capitalist system as developing and another as underdeveloping, or of seeing imperialism and dependency as two sides of the same coin, with the dependent world reduced to a passive role.

There are, of course, elements within the capitalist system that affect all developing economies, but it is precisely the diversity within this unity that characterizes historical processes. Thus the analytical focus should be oriented towards the elaboration of concepts capable of explaining how the general trends in capitalist expansion are transformed into specific relationships between individuals, classes and states; how these specific relations in turn react back upon the general trends of the capitalist system; how internal and external processes of political domination reflect one another, both in their compatibilities and their contradictions; how the economies and politics of peripheral countries are articulated with those of the centre and how their specific dynamics are thus generated. However, as is obvious, it is not at all clear why this approach to the analysis of peripheral capitalism should be restricted to – or even labelled as – dependency analyses; so (fortunately) it has outlived their demise.

WHATEVER HAPPENED TO THE STRUCTURALISTS AND THE DEPENDENTISTAS AFTER THE FALL OF ALLENDE AND THE BERLIN WALL?

The two characteristics of structuralist and dependency analyses that are most relevant to the story of the subsequent downfall of Latin American critical thinking are the highly economicist nature and the increasingly fundamentalist character of a substantial part of their pre-1980 intellectual output (especially of the politically most influential ‘development of the underdevelopment’ approach to dependency analyses). What I mean here by ‘fundamentalist’ is that the ‘purity of belief’ increasingly came into conflict with the intricacies of the real world.

The central proposition of my 1978 survey on dependency (Palma 1978) was that in most of these analyses the complex dialectical process of interaction between beliefs and reality kept breaking down. Although not an unusual phenomenon in the social sciences, this took rather extreme forms in most dependency studies. In fact, while many dependentistas wrote during the 1960s and early 1970s on the supposed non-viability of capitalist development in LA, the region was experiencing a rather dynamic period of economic growth: while the authors discussed above were busy writing about the intrinsic

incapacity of peripheral-type capitalism to develop the productive forces in LA, in the six countries for which data are available (Argentina, Brazil, Chile, Colombia, Mexico and Venezuela), productivity per hour worked grew at an average annual real rate of 3 per cent for three consecutive decades (1950–1980) – a performance that had no precedent in the region and has had no continuation ever since. Thus, while a considerable part of the Amazon was being deforested to keep up with the ‘pessimistic’ dependentista publications of the time, these countries were actually ‘catching up’ with the United States (US) during this period: the corresponding rate for the latter was only 2.2 per cent p.a. Overall, during these three decades the average productivity per hour worked of these six Latin American countries increased by a factor of 2.4, with Brazil and Mexico more than trebling it; that is, they managed to multiply their productivity per hour worked by a factor of 3.6 and 3.3, respectively – one that is similar to that which India, Thailand or Vietnam have achieved in the last three decades, and faster than the respective performances of Singapore, Hong Kong, Malaysia or Indonesia during this period (see GGDC 2015).

In other words, these authors (as so much of progressive thinking at the time – and now) seem to have been totally unable to distinguish between a (well-justified) socialist critique of peripheral capitalism, and the analysis of whether this system was able to develop – ‘warts and all’ – the productive forces of the periphery.¹⁰ The confusion between these two totally different aspects of the analysis (perhaps the most salient aspect of Marx’s work is that he never fell into this populist trap) has been perhaps the trademark of much left-wing critical thinking since Lenin opened the floodgates to this type of analysis with his 1916 pamphlet (and it continues today unabated).

There is little doubt that the progressiveness of capitalism has manifested itself in the periphery (then and now) rather differently from that in advanced capitalist countries, and that it has mostly benefited the elite almost exclusively, or that it has taken on a cyclical nature, and that it has manifested differently in the various long-term technological cycles of the world economy (Pérez 2002). In other words, at the same time that the development of capitalism in the periphery has been characterized by its usual contradictory and exploitative nature, it has also had its remarkably different specificities; and these stem precisely from the particular ways in which these contradictions have manifested, the different ways in which many of these countries have faced and temporarily overcome them, the ways in which this process has created further contradictions, and so on. It is through this process that the specific dynamic of capitalist development in different peripheral countries has actually been generated.

Reading the political analysis of most dependentistas at the time, one is left with the impression that the whole question of what course the revolution should take in the periphery revolved solely around the problem of whether or not ‘proper’ capitalist development was viable. Their conclusion seems to be that if one were to accept that capitalist development is feasible on its own contradictory and exploitative terms, one would be automatically bound to adopt the political strategy of waiting (‘Penelope style’) and/or facilitating politically such development until its full productive powers have been exhausted; and only then to seek to move towards socialism. As it is precisely this option that these writers wished to reject out of hand, they were obliged to make a forced march

¹⁰ Analysis and ideology are indissolubly mixed; see Hugh Stretton (1969).

back towards a pure ideological position in order to deny any possibility of meaningful capitalist development in the periphery at the time – even if this was taking place in front of their own eyes.

Oddly enough, nowadays I would struggle to find sufficient publications that are properly critical of capitalism in its remarkably disappointing neoliberal reincarnation to justify a similar survey article (as my 1978 one), even though productivity per worker in most of the region has been practically stagnant during the last three decades: the average productivity growth for the region as a whole between 1980 and 2014 is just 0.1 per cent p.a. in real terms. If the difficult 1980s are excluded, this average is still below 1 per cent p.a. (see GGDC 2015). And what critical literature does exist tends to concentrate mostly on important but rather specific issues, such as the urgent need to reintroduce some form of ‘market-friendly’ trade and industrial policies, ‘prudent’ capital account regulations, more growth-enhancing macros (that is, with reasonably competitive exchange rates and ‘softer’ monetary policies), and increased investment in human capital and technological innovation and absorption.¹¹

This remarkably unimpressive average does not mean, of course, that nothing has been happening in the real economy. The basic difference between the two periods (pre- and post-1980) is that while during the former the engine (manufacturing) was able to pull along the rest of the economy with it – Kaldorian and Hirschmanian style – during the latter the new engines (unprocessed commodities, retail and finance) have failed to do the same. As a result, on aggregate, gross domestic product (GDP) growth during these three decades is almost entirely explained by employment creation; and most of this has been generated in low productivity growth potential, low-wage, mostly precarious jobs in services. Not surprisingly (for those who still attach relevance to this statistic), average total factor productivity (TFP) growth has been negative for most countries of the region during these three decades.

However, the problem with many dependentistas was not only related to how factual matters were revealing their internal theoretical inconsistencies. It was also about the emotional energy that most of them had invested in the idea that peripheral capitalism was about to collapse under its own (dead) weight, and the symbolic meaning that they began to attach to the almost inevitable arrival of socialism in the region. Basically, there was no question in their minds that capitalism in LA would dissolve well before it had matured. Even though it could be argued that political events in the following four decades may have proved them right in their ‘now or never’ approach to the socialist revolution in the region, the question still remains: why did their analyses have to be fixated (*à la* Narodnik in late nineteenth-century Russia; see Palma 1978) on trying to prove the economic non-viability of capitalism in LA in order to argue for this ‘now or never’ hypothesis, as if one was a necessary precondition for the other?

Since Picasso once said that ‘every portrait also has to have elements of a caricature’, perhaps I may be forgiven for providing one: a great deal of dependency analysis became a bit like one of those cults that predict the end of the world – in this case, ‘The end of capitalism in the periphery is nigh!’ The serious point I am making, of course, is that

¹¹ See, for example, the papers collected in Ocampo (2005) and Ocampo and Ros (2011). In this area see, for example, the work of Carlos Díaz-Alejandro, Fernando Fajnzylber, Ricardo Ffrench-Davis, Roberto Frenkel, José Antonio Ocampo, Carlota Pérez and (the honorary Latin American) Lance Taylor.

the problem with the members of those cults is always the same: what are you supposed to do the day after the predicted doomsday date has passed? Especially when in Latin America capitalism, far from collapsing like a house of cards, gained instead a new and powerful lease of life as a result of a rather remarkable set of events far away, such as the neoliberal reforms in advanced countries and the surprisingly successful post-Berlin Wall new process of re-legitimization of capital. The region's oligarchy in particular gained a new lease of political life characterized by a degree of political and ideological hegemonic control not seen in the region since before World War I.

The notion that this new lease of life for capitalism in LA has so far not been particularly dynamic – in terms of productivity growth in most countries of the region perhaps the most disappointing ever since they could possibly be categorised as 'capitalist' – (Palma 2010) does not change the fact that capitalism did get a new lease of life when it was supposed to collapse: 'subprime' capitalism is still capitalism. The lack of dynamism is fundamentally related to the fact that the logic of accumulation and policy-making switched from state-led ISI industrialization to what could be called 'plantation economics cum downwardly flexible labour markets, sophisticated retail and easy finance'. Therefore, industrialists lost most of their political power to those associated with commodities, finance and retail, making LA resemble what could have probably happened in the US, had the South won the Civil War.¹² As a result, the new lease of life of Latin American capitalism has been characterized mostly by rentier and predatory forms of accumulation (by both domestic and foreign capital), which followed a rather extreme process of primitive accumulation, especially through remarkably corrupt privatizations.¹³ Not surprisingly, this faltering process of accumulation has brought not only 'premature de-industrialization', but also economies with little or no capacity to increase labour productivity (particularly when measured in 'per hour worked' terms, rather than per worker). Still, the poor performance of most countries in LA does not change the fact that capitalism was politically re-energized when it was supposed to disintegrate.

There is little doubt that many structuralists and some dependentistas did make substantial contributions to our understanding of how capitalism works in the periphery. Dependency analysis also had a powerful impact on the anti-capitalist and anti-imperialist struggles in the region. It even had an impact on the anti-fascist struggles in Spain and Portugal. And, of course, many dependentistas were prepared to put their own lives on the line for their ideas. But as a whole, dependency analysis as an intellectual approach ended up being significantly constrained by its extreme economicism and its growing fundamentalism (and concept-worshipping), in which, as mentioned above, the purity of belief inevitably came into conflict with the complexities of the real world.

From my point of view, this growing fundamentalism was related to the fear that by allowing new ideas or forms into one's system of belief, they might destroy the belief itself. An example of such an idea for many dependentistas would have been a consideration of the real possibility that the struggle for socialism in post-Cuban Revolution LA might yet prove to be a rather long, intricate and, in general, pretty uncertain affair. And

¹² Consequently, the manufacturing industry was decimated; see Bresser-Pereira (2013), Tregenna's Chapter 38 in this *Handbook*, and Palma (2005, 2008b, 2013a).

¹³ For the many shady privatizations in the Chilean case, see especially Monckeberg (2001); see also Palma (2013b).

for structuralists, an example of such an idea would have been the realization that the emerging ISI industrial bourgeoisie was quite happy to appropriate all forms of rents created by the state with its ISI policies, provided they did not come (as in East Asia) with performance-related conditionalities, or that they would have had to move eventually to a meaningful process of regional integration. That is, when it became obvious (yet again) that the Latin American capitalist elite only likes carrots that come with no sticks.

The dread of a collapse in one's system of belief can easily bring the destructive instinct into play: a fundamentalist system of belief needs constantly to 'purify' the realm of ideas. There can be no such thing as the right of dissent. For example, in dependency analysis one finds increasingly over time Britton's proposition of an inverse relationship between the expectation to understand the real world and the intolerance of dissent (see Britton 2002). This, of course, is not unique to dependency analysis, as it has also characterized a particular intolerant neoliberal ideology afterwards; for example, Gustavo Franco (Harvard PhD and one-time heterodox economist), when asked as head of Brazil's Central Bank during Cardoso's first term of office why he became neoliberal, his answer was simply: in Brazil at the time 'the choice [was] between being neo-liberal or neo-idiotic [neo-burro]' (*Veja*, 15 November 1996).¹⁴

However, even if a significant part of dependency analysis was eventually hijacked by fundamentalist beliefs, the post-war Latin American critical tradition did have a great deal of critical creativity, especially in the way in which it tried to articulate many of its inputs (French structuralism, the German Historical School and Keynesian macro-economics) with Latin American economic and political realities.¹⁵ Of course, part of the subsequent problem also came as an influence from abroad when in a great deal of dependency analysis this mix was eventually taken over by the 'global' dogmatic left-wing thinking which characterized radical thinking – both Marxist and non-Marxist – in so much of the world at the time. And this phenomenon helps to explain why this critical tradition collapsed when the overall political climate changed for reasons that were pretty much unrelated to LA.

In sum, as an intellectual movement, the pre-1980 critical tradition in LA had many original inputs and creative thinkers, but no strong political and social base. Moreover, a great deal of the movement was eventually seduced by fundamentalist beliefs not just due to the above-mentioned influence of 'global' dogmatic radical thinking of the time but also due to the fact that most of its analyses got stuck in analytical cul-de-sacs. As mentioned above, in the case of the structuralists the latter happened when it became obvious that the Latin American capitalist elite was quite happy to appropriate all forms of rents created by the state with its ISI policies, provided they came with no compulsions of any kind. In turn, in the case of the Marxist left associated with the Communist Parties, this happened when it became obvious that broad anti-imperialist alliances did not work because the domestic bourgeoisies were anything but anti-imperialist. And in the case of the 'insurgent' left, this point was reached when it became obvious that the Cuban Revolution was not replicable in the rest of the region, even if the armed struggle was led by a figure such as Ernesto Guevara.

¹⁴ For a similar simplistic ideological discourse, but in dependency analysis, see some of the related papers in *Latin American Perspectives*.

¹⁵ Cardoso (1977) once called this 'the originality of the copy'.

As Marx had warned a long time ago in his analysis of events in France in 1848, ‘people make their own history, but they do not make it as they please; they do not make it under circumstances they themselves have chosen, but under given and inherited circumstances with which they are directly confronted’ (Marx 1852). A statement relatively easy to understand in a superficial sense, but rather more complicated to integrate properly into one’s political analysis and action.

The election of Allende in Chile in 1970 gave all branches of dependency analysis a much-needed boost (and many structuralists and dependentistas held senior jobs in government), but with the deaths of Allende and of the ‘Chilean Road to Socialism’, structuralism and dependency analysis went into a steep decline, which in the case of the latter proved to be a terminal one.

So, structuralist and dependency analyses were not only too economicist and (in the case of most of the latter) increasingly fundamentalist, but also got themselves into analytical dead ends, which in part explains not only why they were obliterated by later events, but also why it has proved to be so remarkably difficult to recover subsequently. That is, these cul-de-sacs were so intractable that they seem to have led structuralists and dependentistas to fail in what Keynes calls ‘the struggle of escape’ (following his own efforts to break out from the analytical constraints of mainstream economics of the time; see Keynes 1936, 9).

So, what needs to be analysed next is not only why most of the Latin American left lost its absolute certainties; it is also why, instead of moving from a position of absolute certainty to one of absolute doubt – or, ideally, to a more creative position based on uncomfortable uncertainties – it actually chose to move from one type of absolute belief to another. That is, why an important part of the Latin American left was seduced by the next available religion: neoliberalism of the type embodied in Mrs Thatcher’s favourite slogan: ‘There is no alternative’.

SWITCHING FROM ONE FORM OF ABSOLUTE BELIEF TO ANOTHER

Even though much has been said regarding the ideological transformation of most of the Latin American left after the 1982 debt crisis and the fall of the Berlin Wall, the basic question remains: why has the mainstream of Latin American socialism mutated from a ‘dangerous’ idea or movement to becoming the capitalist elite’s best friend – especially so of that famous top 1 per cent? The two Socialist parties in Chile, the Workers’ Party in Brazil (and the African National Congress, ANC, in South Africa) are the paradigmatic cases.¹⁶ One of the key problems for the left today is the difficulty in implementing a progressive development agenda, one that now has to be appropriate to the new world order with its new technological paradigm, the rise of China and India, and so on. This type of agenda requires a sufficiently strong domestic constituency behind it so as to be able simultaneously to take on all the usual suspects (in the form of international

¹⁶ For an early analysis of the ‘new left’ phenomenon in the Australian context, see Harcourt and Kerr (1980). For an analysis of economic ideas and institutional change in the twentieth century, see Blyth (2002), Chang (2003), Kozul-Wright and Rayment (2007) and Reinert (2007).

and domestic forces) that are fiercely opposed to it. This constituency is required, for example, for the state to be able to impose East Asian-style discipline on capitalists (and sometimes on workers); it is also required to carry out other necessary economic and social restructuring, like the modernization of the state, a progressive system of taxation – that includes the appropriation of rents associated with natural resources – and the implementation of trade and industrial policies that would ensure the productive use of all forms of rents, better technological absorption, and so on. One of the main lessons of the economic and political history of the South is that these strategies seem to be feasible only if those at the top happen to face relatively limited internal opposition. That is, in most places apart from East Asia – which had a very unusual history to do with the specificities of Japanese colonialism – this has proved very difficult to organize politically (see Khan 2000).

The ‘new left’ in LA is characterized by having come to the conclusion (a bit too eagerly) that, under the current domestic and international constraints, the assemblage of the necessary social constituencies for progressive development agendas is off the political map. As a result they gave up their progressive agendas, abandoned the economy as the fundamental site of the struggle, and eventually conceded the whole terms of the debate.¹⁷ Why?

In the answer to this question there are two distinct and separate interacting issues. One relates to the complexities of the period’s politics and political economy (both at home and in the international arena); the other, to subjects such as ideology and the nature of the Latin American ‘progressive’ intelligentsia.¹⁸ Starting with the first, one aspect that is necessary to take into account is the political pressure put on left-wing parties by the difficult transitions to democracy. Democratic governments became possible in LA (and South Africa) during the rapidly changing 1980s and early 1990s; a period of radical political change in the US and Europe, the collapse of the Soviet Union, rapid globalization, the rise of the East, new technological and institutional paradigms, and so on. And they became possible in part due to controversial political settlements based on an agreement (partly explicit, partly implicit) that the new democratic forces when in power would not challenge existing structures of property rights, rents or incentives. Probably the best way to summarize the nature of these transitions to democracy in LA is that implicit in them was the understanding that Latin Americans would get their much-desired freedom of speech, provided that in practice they would not demand, and eventually they would not even think, what they had previously been forbidden to say. And almost before anybody could notice, the ‘new left’ became converted to the four key dogmas of neo-liberal thinking.¹⁹

¹⁷ According to Faletto, for many in the left suddenly ‘the core issues that had characterised dependency analysis – national autonomy and sovereignty, and alternative development strategies – looked as if made totally irrelevant by new events, and the only apparent alternative became how to integrate quickly into the “new modernity”’ (1999, 25; my translation); a ‘modernity’ that, according to Adorno (1974), had a peculiar characteristic: ‘Today the appeal to newness, of no matter what kind, provided only that it is archaic enough, has become universal’.

¹⁸ However, in the analyses of historical events one inevitably has to make an almost metaphysical effort to separate analytically these two sides of the opposition, and how they interacted in those events.

¹⁹ i) Anything that happened before the neo-liberal reforms was wrong, inefficient and populist; ii) once the reforms have been implemented, any further problem could only be solved by more neo-liberal reforms – otherwise, this was a problem that had no solution; iii) the only role of economic policy is to generate

The main point I am making here is that this transformation of these ‘urgent necessities’ into policy and then into ideology (of the neoliberal left type) – or from tactic to strategy, and then to principle – has a further twist in LA. How truthful and extreme were those ‘urgent necessities’? How much was this ‘fierce urgency of now’ also self-constructed contingencies, in the sense that they resulted, at least in part, from having already opted for the risk-averse option to continue with an unmodified neoliberal economic model?

In other words, following Sartre’s concept of ‘*mauvaise foi*’ (bad faith),²⁰ what I am really saying is that I believe that a key component of the ‘urgent necessities’ argument used by the ‘new left’ everywhere in LA, but especially in Chile and Brazil (and South Africa), was simply an exercise destined as much to deceive others as to deceive themselves into believing that the transformation of society had become the ultimate unacceptable risk.

And as progressive change came off the political agenda, the Latin American left separated into three camps: the ‘managerial’ left, the ‘traditional’ one, and the ‘radical’. The first, which included the majority of the ‘official’ left, together with aiming at the reversal of as many aspects of the previous development strategy and policies as possible, reinvented itself as a new political movement with only one progressive challenge ahead: to manage effectively a new type of social-risk ‘hedging state’ (that is, one with an efficient agenda of safety-nets). The traditional left, in turn, also continued to be stuck in the past, but in this case by trying to reproduce it, as in some sectors of the Venezuelan and Argentinian left. That is, while the former wishes to construct a future that is the exact opposite of a demonised past, the latter tries to build a future that is a replica of an idealised past. The third, the radical camp, tried instead to remain as a critical thinking force, but today is rapidly becoming an endangered species, helped to endure in this difficult struggle only by several spontaneous outbursts of popular discontent.

In terms of the managerial left, what is ironic in this respect is how my ‘neo-comrades’ are also still stuck in the past. In fact, as suggested above, it would not be an exaggeration to say that they are as much so as the traditional left, because while the latter simply attempts to replicate past economic policies as if we were still in the same old technological paradigm, and in the same pre-1980 international economic order, the former equally wants to do the same, but exactly the other way round. That is, they seem to be guided by a discourse that resembles a compass whose magnetic north is simply the reversal of as many aspects of the previous development strategy and policies as possible: that is, everything the other way round (plus ‘clusters’). The mere idea that different, more pragmatic and more imaginative alternatives could exist, as those attempted in Asia – alternatives that could be more appropriate to the current technological and global institutional environment – is rejected out of hand. For example, if pre-1980 (pre-1973 in Chile) economic policies in the region were characterized by high tariffs, strict capital controls, strong presence of the state as a direct producer, public investment as high as two

‘credibility’; and iv) the only way forward is to open up the economy fully to globalised capitalism, especially its finances, even if this means having to live from then on permanently in an economic ‘state of emergency’ — and, of course, in such a high economic risk environment, the transformation of society becomes the ultimate unacceptable risk (on the latter point, see Arantes, 2007; see also Palma, 2010).

²⁰ For a definition of an argument of ‘bad faith’, see Sartre (1993).

digits of GDP, relatively progressive taxation, the appropriation of rents from natural resources, clearly defined industrial policies, and so on, today they preach exactly the opposite: free trade, free capital movements, the privatization of everything that moves in the public sector, low levels of public investment (since 1980, public investment has not averaged more than 3 per cent of GDP in any country in LA), regressive taxation, no proper royalties to appropriate the rent from natural resources, no trade or industrial policies (at most some horizontal incentives), and so on.

In sum, the new development strategy of the 'new left', and its related economic policies, has a simple guiding principle: to think now of what before was considered virtue as vice, and what was considered vice as virtue. This narrow reverse-gear attitude has delivered not only a disappointing economic performance (particularly in terms of productivity growth), but also rather odd political settlements characterized by a combination of an insatiable top 1 per cent, a captured 'progressive' political elite (the dominant classes are quite happy to let them govern as long as they do not forget who they are), passive citizens, and a stalled social imagination; all made more palatable by an agenda of safety-nets. A dull *mélange* that at times is sparked off by outbursts of popular discontent (especially from students). And while both the traditional, and the 'new' left are still stuck in the past, the world moves on, there is a technological revolution that has changed almost everything, international financial markets have become monstrously large (and have detached from the real economy, and become self-destructive), Organisation for Economic Co-operation and Development (OECD) economies are ever more geriatric, and Asia forges ahead.

Perhaps nothing shows better this Latin American narrow reverse-gear attitude in terms of development strategies and economic policies than a statement made by the head of Brazil's Central Bank (a former heterodox economist) at the time of Cardoso's economic reform; when asked about the soul of their economic agenda, his reply was to the point: '[having] to undo forty years of stupidity' (*Veja*, 15 November 1996).

Here the million-dollar question is: why is it that in LA (now and in the past) ideologies tend to be so remarkably rigid? My own perspective in this is that a crucial component of the answer lies in the fact that in LA there is little else in the form of social cohesion.²¹ But, whatever the reason for this perennial ideological rigidity, what we find in LA in the last 30 years (as the subtitle of this chapter indicates) is a movement from one type of absolute certainties to another – which turned out to be the exact opposite of the former.

And in order to implement successfully their still-stuck-in-the-past ideology, the critical trick of the managerial majority was to disguise their new pro-business approach (which in the Latin American context inevitably means pro-large oligopolistic corporate interest) in a fog of new-look pragmatism and, in particular, never to say or do anything that could wake the socialist ghosts of the past. Eventually, for them to be or not to be left-wing became practically a biographical fact; just an eccentric detail that needed to be played down in their *résumés*. It also helped them to convince themselves and the rest of society that the dissident left-wing camp that tried to look forward was just made up of pedantic doctrinaires; or, as Cardoso labelled them, of 'neo-bobos' (neo-silly).

²¹ See, for example, Palma (2010, 2011).

Perhaps what has happened in LA in this respect can be better explained (as Arantes does) by restating Adorno. For him 'intelligence is a moral category' (1951: 197); maybe there are times — as is the case of LA today — when a lack of critical thinking can also be turned into a 'moral category'.

It would not be an exaggeration to suggest that perhaps there is an important similarity here between (former best friends) Mrs Thatcher and Pinochet. In one of her last interviews, the ex-British Prime Minister (rightly) said that her finest political achievement was 'New Labour'. Likewise, perhaps the greatest political achievement of Pinochet (and other military dictators of that time) is the Latin American 'new left'.

No doubt all this has an element of pragmatism, which is necessary for political survival everywhere. But there is nothing like automatism as a force towards the giving up, little by little, and almost without noticing, of one's own convictions. And there is surely a difference between pragmatism and 'cynical-realism'.

And as Oliveira (2006) has argued, almost before anybody could notice, change happened not only at the level of ideas but also at a politico-institutional level; and the Workers' Party in Brazil, for example, began to resemble closely a Peronist-type party in its style of government, in the way it dealt with internal dissent and in its growing level of corruption. And in Chile, according to a former president of Allende's Socialist Party, his party now resembles a 'pure clientelist machinery' (see Basadre 2008).

However, the issue of why it was so difficult for most socialist thinkers in LA (and elsewhere) to integrate markets with their previously held beliefs is a complex one. As Gramsci said, for an ideology to remain hegemonic it has to be able to absorb (in a creative sense) elements from alternative ideologies. But the bottom line is that in this case new ideas, instead of interacting creatively with existing ones, ended up shattering the previous system of belief; so, a new set of ideas and beliefs ended up simply replacing the preceding ones. This did not happen in Asia, at least nowhere to the same extent as in LA. For example, in many countries in Asia economic reform was implemented in a much more pragmatic, imaginative and diverse way, and all actors in favour of the reforms (including local capitalist elites and most ex-anti-capitalist intellectuals) were probably just too cynical to be charmed by fashionable new Western ideologies — especially if most of the so-called 'new' ideas were just recycled ones from the past (see Krugman 1995). In short, they did not fall, as their Latin counterparts did, for the mirage of 'newness'. At the same time, a critical tradition remained; as was the case, for example, in India.

From this perspective, perhaps what led to economic reforms being implemented so differently in LA and in many countries in Asia after 1980 (remarkably rigid in the former, with an important component of pragmatism in the latter) is that in the former policy-makers of most political persuasions, including the 'new left', were just too eager to believe that neoliberalism and the Washington Consensus were a set of ingenious tricks devised by Dumbledore, while in the latter they instinctively suspected that most likely they were the work of Voldemort.

To understand the work of the latter one could resort to Darwin. As Tony Lawson has argued (in a different context):

a central and great Darwinian insight is that a subset of members of a population may come to flourish relative to other members simply because they possess a feature, which others do

not, that renders them relatively suited to some local environment. The question of the intrinsic worth of those who flourish most is not relevant to the story. (Lawson 2003)

Natural selection mechanisms of this sort are crucial to understanding what neoliberalism is really about: it is about deliberately creating an artificial economic environment that is most suited to those features that capital has and others do not – in the jungle, capital is king (and remarkably mobile . . .). The neoliberal discourse may be apparently about promoting order based on freedom, individual initiative and sound macroeconomics, and about fighting paternalism. But what it has turned out to be is the promotion of a special type of disorder that can help to legitimize the supremacy of capital, as in a high-risk and unstable environment only it can thrive.

Something similar to the ‘new left’ phenomenon in LA happened to the ANC in South Africa. Moreover, more than anyone else in the world the ANC did have the political constituency necessary to construct a feasible alternative progressive agenda. In LA, only Lula and the Workers’ Party in 2002 had a political constituency for this that could possibly resemble the ANC’s in 1994 – a capacity to transform that was also very much wasted.

I sometimes wonder whether the brand of neoliberalism bought by the ‘new left’ in LA is just shorthand for ‘nothing left to decide’; and, of course, ‘nothing left to think about critically’. Indeed, the ‘new left’s attitude towards neoliberal economics today resembles Lord Kelvin’s attitude towards physics at the end of the nineteenth century, when he declared that ‘there is nothing new to be discovered in physics now. All that remains is more and more precise measurement’ (Kelvin 1900).

Of course, there is a real world out there, and the radical left is certainly not known for its capacity to construct practical alternatives. But why did the managerial left have to move all the way to a ‘subprime’ neoliberal understanding of the world in order to be able to construct a practical alternative under current political and political-economy constraints? If the managerial left in LA was willing to concede the economy as the fundamental hub of the struggle, why were they not even able to construct a practical alternative which at least contained a more liberal-progressive Keynesian understanding of economic life and a more radical-democratic understanding of political life? Why were they so desperately keen to concede the economy, the terms of the debate, and almost everything else? Why, when events moved in such a wrong direction, did they feel that they had lost all their progressive relevance and were therefore unable to hold basic ideological principles in their minds in a thoughtful way? And why do they have to look at the past with such contempt? So much so that all they want to do now is the exact opposite.

From this perspective (and as opposed to the economicistic reductionism of the Washington Consensus), one should not forget that, according to Foucault, neoliberalism, at least in its origins, was conceived not as a set of economic policies, but mostly as a ‘positive’ form of social regulation: one that went far beyond the usually acknowledged set of ‘negative’ reactions to the Keynesian welfare state (such as the retreat of the state and the lifting of controls and regulation necessary to unleash again unfettered market forces, or about the disappearance of the nation-state). It was in fact supposed to be a novel reconfiguration of power leading to a new type of ‘governmentality’; that is, a new form of interaction between political power (and knowledge and discourse) and the dynamics

of the unregulated market. If only my 'neo-comrades' had understood this and made an effort to make sure that neoliberalism would least steer towards that original aim.²²

What seems to be peculiar to LA is that when the idea of the unremitting critique of the economy got stuck within dependency analyses, those within this tradition who wanted to shift to other critical discourses in an organic way (such as towards radical democracy, gender identity, the fate of indigenous people, the environment, and so on), because their previous analyses had been based almost exclusively on an *economicist* critique of capitalism, found it almost impossible to do so. That is, the left that wanted to abandon the economy as the fundamental site of the struggle but still continued to think critically, found it very difficult to do so as it seems to have felt that it had lost not just some but most – if not all – its progressive significance. That was not the case in many other regions, where a significant part of the left was able to shift their analytical focus from 'the economy' to other issues; so, critical thinking could at least continue.²³

What is crucial here is that as the 'new left' in LA believes that it cannot get political power to implement its own progressive agenda, it ended up trying to gain power to implement what Francisco de Oliveira has called an 'upside-down hegemony' (Oliveira 2006). In short, 'if you can't beat them, join them' became the (not so) innovative battle-cry of my neo-comrades – together with their 'third way' discourse (which proved to be just a phoney ideological disguise – just an attempt to masquerade newly-acquired 'beliefs' as if they were 'ideas').

And LA's 'new left' has proved to be remarkably effective in the implementation of their upside-down hegemony; according to the *Wealth Report* (2014), in the last ten years no other main region in the world has created so many millionaires (that is, individuals with US\$30 million or more in terms of net assets, excluding their principal residence), centa-millionaires (those with net assets of more than US\$100 million) and billionaires as LA has done. And within LA, perhaps not surprisingly, those countries with 'centre-left' governments are the ones with a rate of increase of these types of millionaires well above average. For example, as for the Workers' Party Brazil, the report estimates that in 2013 one additional person became this type of millionaire every 27 minutes – in a country with a practically stagnant economy. In fact, according to the above-mentioned report, during the last decade (that is, the two periods of Lula and one of Dilma) dollar millionaires (as above), centa-millionaires and billionaires increased by 273 per cent, 274 per cent and 256 per cent, respectively. When Cardoso was once asked his opinion of Lula as President, his answer was brief and to the point: 'He knows how to please the elite.' In fact, it took Lula (of all people) 5 years as President to make his first visit to a favela.

The bottom line, as Freud (1908) reminds us (see the epigraph), is that in LA today it is again equally true that one should not be so appalled at these kinds of events, because it was our expectations which were totally out of place: 'In reality our fellow-citizens have not sunk so low as we feared, because they had never risen so high as we believed'.

When Keynes said, 'people usually prefer to fail through conventional means rather than to succeed through unconventional ones', he could not have guessed just how

²² For Foucault's analysis, see especially Foucault (1980); see also Frangie (2008) and Palma (2009).

²³ In the Arab world, for example, *secularism* and the Palestinian issue helped maintain the progressive relevance of the left that wanted to *concede the economy* but still continue to think critically (see Frangie 2008).

accurately his remarks would define 'new left' governments in office in LA today. As it has turned out, both Keynesian-style liberalism and neoliberalism have proved to be de facto counter-cyclical ideologies basically aiming to change the balance of power between income groups, each emerging at a different phase of the cycle: post-1930s FDR-ism (where FDR stands for 'Franklin Delano Roosevelt') and Keynesianism as a result of the disruptive effects of a crisis-ridden unregulated capitalism; post-1980 neoliberalism as an attempt to return power and control to their 'rightful owners' (capital).

As is so often the case, Hirschman provides a crucial insight into the switch from one kind of 'absolute belief' to another. Discussing what he saw as long-term cycles of preferences for public versus private provision of goods in the developed world, he argued that the post-1980 backlash against Keynesianism and *dirigiste* policies had a lot to do with the stagflation in the 1970s (Hirschman 1982). This accelerated a growing collective frustration concerning the effectiveness of state regulation and led to radical calls for more laissez-faire policies. He argued that sustained frustration and disappointment with existing institutions can lead to extreme rebound effects demanding radical changes in policy. Long-term cycles of preferences for public versus private provision of goods may be explained by such mechanisms. For him, such disappointment must often cross a threshold before it is consciously acknowledged; people have a tendency to deny bad choices and stick to them for far too long. But when they do finally admit to their disappointment, it is likely that it would take the form of a rebound effect; and the longer the denial of bad choices, the stronger the reverse shift. In fact, he thinks that 'a good portion of the so-called puzzle of collective action and participation in public affairs disappears when the rebound effect is taken into account' (Hirschman 1982, 81). And few reverse shifts (or rebound effects) have been so pronounced as the one that took place in LA after 1980, and have led so mechanically to exactly the opposite set of policies. As indicated above, as ideologies are so crucial in LA perhaps Latin Americans have a tendency to deny bad choices and stick to them for much longer than most. So, perhaps one should not complain so much when the inevitable (and massive) rebound effect comes along.

CONCLUSIONS

You have really got to hand it to the Latin American capitalist elite. In the 1950s and 1960s they convinced the progressive forces of the region (all the way up to the Communist Parties) that there was nothing more anti-imperialist than to provide them with vast rents via ISI, and that these huge rents (as opposed to what was happening in East Asia at the time) should be given without any form of performance-related conditionality (including export diversification). And now, in the new century, their process of relegitimization has been so remarkably successful, and their new technologies of power so effective, that they have convinced the majority of the left not only that 'there is no alternative' – and, therefore, nothing left to decide, and even less to think about critically – but also that they actually deserve every privilege and reward (and, of course, every rent and free lunch) that they can get. In the case of Chile, for example, with the Concertación or New Majority in its fifth term of office since the return to democracy in 1990, few question the fact that according to a recent study on tax returns (that is,

not counting tax evasion), the top 1 per cent – including retained profits, but excluding capital gains – happily appropriates about one-third of national income (32.8 per cent – in Korea this is just 12 per cent; for the Chilean data see López et al. 2013); and all this in a democracy (maybe a low-intensity one, but democracy nonetheless), and in one that prides itself on being ‘centre-left’. Using Hirschman’s terminology, now the Latin American ‘new left’s ‘tolerance for inequality’ seems to know no bounds. In fact, if one looks inside this top 1 per cent it gets even worse: the top 0.1 per cent of taxpayers now gets one-fifth of the national income (19.9 per cent – in Korea this is only 4.4 per cent), and the top 0.01 per cent – corresponding to individuals belonging to just 300 families – gets more than one-tenth of the total (11.5 per cent – in Korea this is just 1.7 per cent).²⁴ Perhaps the greatest irony of them all is that neoliberalism was originally advertised as ‘the alternative’ to the (Roosevelt–Keynesian) ‘road to serfdom’ (Hayek 1944); a contender for the *Guinness Book of Records* section on ‘delusional discourse’.

Chile’s remarkable inequality after more than four decades of uninterrupted neoliberal policies – of the authoritarian and ‘centre-left’ versions – puts into context Hayek’s cheerful vision of the effectiveness of what he calls the ‘spontaneous order’ as an engine of history. For him, this order, via its supposedly uniquely effective set of incentives, makes it possible to use the knowledge and skills of all members of society in a much more efficient way than any possible alternative (Hayek 1991). In his analysis it follows that any regulation of this ‘spontaneous order’ attempting to interfere with its structure of incentives (such as those devised by Roosevelt and Keynes in the 1930s, 1940s and 1950s, for example) would inevitably constrain the entrepreneurship and capacity-building of individuals. Instead, greater freedom of personal endeavours would lead to a greater level of progress. However, following this logic, it is particularly difficult to understand the growing inequality of the last 30 years, reflecting how remarkably skewed this new order is in terms of its distributive outcomes (that is, how rigged it is when it comes to the issue of rewards for effort and skills). The case of Chile’s current appalling inequality is just one fairly illustrative case of how the famous ‘invisible hand’ is neither invisible nor even-handed. And following Hayek’s logic, it is of course also rather difficult to understand the 2007–2008 financial crisis, and how it unmasked the self-destructive nature of this famous ‘spontaneous order’, especially when its finances lack the Bretton Woods-type regulation.

So, as it has often been the case, rather than from Hayek’s delusional market idealization, what is happening today in LA could be straight out of a García Márquez magical-realist novel: the dominant classes are quite happy to let the dominated ones govern, provided that they do not forget who they are. That is, they finally understood Adorno (1974): ‘Domination is more effective if it delegates the . . . violence on which it rests to the dominated’ (see the epigraph). For both elites this is a win–win situation: while this weird environment has greatly helped the capitalist elite to relegitimize themselves beyond their wildest imagination (making it possible for them to regain the necessary power and control to accumulate with few market compulsions and a minimal need for open coercion), it has also greatly helped the managerial left both to regain at least some of their

²⁴ See also Solimano and Pollack (2006) for the remarkable ownership concentration in the Chilean Stock Market.

lost powers and privileges, and to construct a relatively effective 'solidarity state' – and (so far) military governments have become *démodé*.

The key proposition of this chapter is that all this is also causally linked to the ideological emptiness of the Latin American mainstream left following the 'post-doomsday date' scenario, when LA's capitalism, far from collapsing like a house of cards (as so obsessively predicted), gained instead a new and powerful lease of life. The failure of the post-Cuban Revolution 'all or nothing'-type political struggle meant that as 'all' was clearly not possible, many ended up believing that the only viable political alternative to 'nothing' was an agenda of safety-nets.²⁵ When all progressive hope had been beaten out of the 'new left', an agenda of safety-nets was all that was left.

As their previous analytical work had been characterized by an unremitting critique of the economy, once the mainstream left conceded the economy as the fundamental hub of the struggle, there was little else left in terms of basic ideological principles to hold onto in a thoughtful way. Basically, they must have felt that by surrendering the economy, they had lost not just some but all of their progressive ideological relevance.

From this point of view, the problem with many dependentistas was related not just to how factual matters were increasingly revealing their internal analytical inconsistencies; it was also about the emotional energy that most of them had invested in the idea that peripheral capitalism was about to collapse, and the symbolic meaning that they began to attach to the almost inevitable arrival of socialism in the region. Not surprisingly, many threw in the towel after the predicted doomsday date had passed. Worse still, some not only lost their previous absolute certainties, but moved from one type of absolute beliefs and certainties to another type of absolute beliefs and certainties; perhaps simply not to lose their balance, they held on to their previous development strategies and policies, but in their exact opposite version. In the meantime, the world (with its new technological and institutional paradigms) moves on, and Asia forges ahead. That is, an important part of the Latin American left was simply seduced by the next available (ideological) religion: 'TINA'. The end result of all of this, as Chomsky has argued, is that 'progressive intellectuals' have ended up as the guardians at the gates of the orthodoxy.²⁶

What we have today in LA is the combination of an insatiable capitalist elite, a captured and unimaginative 'progressive' political elite, passive citizens and a stalled social imagination. One could add that we also have a bunch of neo-comrades who (as Ortega y Gasset analysed as a regional trait) are rather pleased with themselves. Only a few critical doctrinaires whine; particularly from their comfortable tenured positions in universities far away. Why can these *anticapitalistas trasnochados* (stale anti-capitalists) not understand that life is so much simpler when one succeeds in transforming 'delving deeply into the surface of things' into an art form?

In short, was President Lula right when he suggested that the emergence of the 'new left' in Brazil was just 'a positive sign in the evolution of the human species'? Or

²⁵ Some people still think that in Venezuela or Argentina something radically different is supposed to be happening, but so far in both cases the most effective achievement is also an agenda of safety-nets – and not even this has proved to be sustainable; this was not the way things were supposed to play out. For an analysis of Venezuela, see DiJohn (2008).

²⁶ <http://www.zmag.org/znet/viewArticle/18257>.

is Francisco de Oliveira right when he claims that the ‘new left’ in Brazil (and in the rest of LA) is like the platypus, a creature that violates evolutionary theories and yet still exists, and is likely to continue, despite the fact that it is at an evolutionary dead end?²⁷

By being able to convince so many in LA that any progressive alternative agenda today is just a suicide pact, maybe the ‘new left’ has actually become the most effective enemy of any true progressive struggle. Being perfect magicians, no one but they are supposed to know the necessary tricks for making conflict evaporate, coercion conceal itself and military regimes become obsolete. Now, for how long will they be able to tame ‘the dangerous classes’? For how long will they be able to keep getting such a bang for the few bucks they give to the very poor? And for how long will they be able to keep subjective violence in check, while being the very agents of the structural violence that creates the conditions for this violence?²⁸

I do not think it would be an exaggeration to say that no other event in peacetime LA has succeeded in achieving such a powerful rebound effect as the advent of this all-powerful and remarkably tyrannical neoliberal ideology. Nor has any other been able to succeed in constructing such a dominant power structure, one with the same remarkable capabilities for politically debilitating the majority of the population (especially workers and the progressive intelligentsia) via heightening risks and insecurities, as for generating such attractive personal and political rent-seeking opportunities for so many in the left – as well as for those in their ‘intellectual periphery’ – who are prepared to acquiesce.

Such powerful sticks and seductive carrots, combined with the (mistaken) conviction that due to events at home and abroad progressive ideas have lost all their ideological relevance, proved to be a lethal ideological cocktail for the left. As a result, not only did progressive change come off the political agenda of the ‘official’ left, but also (as mentioned above) LA’s mainstream socialism mutated from a ‘dangerous movement’ to becoming the capitalist elite’s best friend. In this process the dominant classes are only too happy to let the dominated ones govern, provided that they do not forget who they are; as a result, the Latin American critical tradition in the social sciences has become practically extinct – and with it, the region’s social imagination has virtually stalled. The economic performance of LA since the implementation of economic reforms may be highly disappointing, but the success of its politics confirms that while its economics is hocus-pocus science, its technologies for social control are some of the most effective ever. In fact, the process of re-legitimation of capital, and (from a Darwinian point of view) their capacity for creating an artificial economic environment most suited to those features that capital has and others do not, has been so successful that it has actually had the effect of ‘closing the imagination’ of both the traditional and new left to conceptualising feasible progressive alternatives – one that would be appropriate to the new technological paradigm and world order, and not be (in one way or another) still stuck in long gone past.

What happens today in post-structuralism and post-dependency LA shows (yet again) that many intellectuals, especially when working without a proper social and political base, can be fickle and can easily turn to the next set of fashionable beliefs on

²⁷ For Lula’s speech, see above quote in *FOLHAONLINE* 2/508; and for Oliveira, see (2003). The platypus is a semi-aquatic mammal (found in Eastern Australia) that lays eggs and suckles its young.

²⁸ On this issue, see especially Žižek (2008).

their horizon to continue with their preferred business: providing a worldview and a theoretical legitimacy to it.

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22. Feminist approaches to development

Maria Sagrario Floro

INTRODUCTION

This chapter seeks to identify the contributions of feminist thought to the understanding of development processes and praxis and to examine the varied feminist approaches that have evolved in the last 40 years. These approaches have emerged from the efforts of feminist scholars, activists, women's groups and some policy-makers in ensuring that gender perspectives are incorporated into research, advocacy and policy. Reflecting different perspectives and experiences, these approaches sought to address the invisibility of women's lives, needs and contributions and the neglect of gender inequality in development discourses and policy agendas. They are part of the broader effort for attaining economic and gender justice and for sustainable and equitable development.

To date, there is a rich body of studies that comparatively scrutinized the various frameworks and approaches used by feminists and gender scholars in conceptualizing and engendering development. As the theme of development is broad and encompassing, the works of scholars on the subject, including McEwan (2001), Goetz (1988), Moghadam (1998), Young (1997), Jackson and Pearson (1998), Elson (1991, 2002), McIlwaine and Datta (2003) Harding and Norberg (2005), Grown (2007) and Beneria and Sen (1982) and Beneria (1995), have focused on specific aspects or sets of issues that are debated in the literature and in the policy arena; these studies also use different taxonomies and classifications in identifying and categorizing the different feminist perspectives on development. This chapter builds on their work and provides additional insights by considering how, collectively, feminist approaches have provided a deeper and more nuanced understanding of the development process. By juxtaposing different perspectives of feminists, the chapter illuminates upon the questions that feminist scholars ask about the notion of human well-being that development aims to achieve and the nature of economic and social progress brought about by development. As Harding and Norberg (2005) astutely remarked, feminists have intervened in the ways that development research think about the process of development. They have developed new approaches that incorporate women's experiences and gender relations in ways that legitimize women's voices as sources of knowledge. They have transformed the epistemologies of their disciplines including economics, sociology, anthropology, philosophy, geography, political science, and so on. They have confronted the gender-blindness of mainstream models and theories of development, and the type of policies and development strategies they promote. As will be shown in the following discussion, feminist thinking and feminist activism have also revealed the tensions regarding the relation between knowledge, power and development outcomes as well as debates among feminists themselves in terms of what needs to be done and how best to accomplish the goals of gender equality (Harding and Norberg 2005, 2011). These tensions and debates are necessary and vital, however, in pushing the boundaries of knowledge and in deepening our understanding of development.

The chapter is organized as follows. The section below discusses the key areas of contributions by feminists in the development discourse. Specifically, it identifies the involvement of feminist scholars and activists in knowledge construction regarding the development processes and their outcomes, as well as the use of such knowledge in bringing about social transformation towards greater gender equality through engendering policy and collective action. It then explores how feminist thinking has challenged the dominant theories and models of economic growth, their underlying assumptions and methodologies. The chapter then examines the main frameworks regarding the relationship between women, gender and development, which are referred to in the literature as the women in development (WID), women and development (WAD) and gender and development (GAD) approaches. Although they share some common viewpoints, these approaches reflect both the diversity of perspectives among gender scholars and feminists and the varied forms of patriarchy experienced by diversely located women. The next section discusses pertinent economic and social forces at play in the last three decades that provided both impetus as well as serious challenges that feminists have to grapple. This section also explores the manner in which the gendered effects of globalization have shaped feminist thinking regarding development and the varied interpretations of the GAD approach that have surfaced and the controversies surrounding them. The chapter then explores the connection between feminist thinking and recent development approaches, namely the capabilities and human development framework and the human rights framework. It concludes with a discussion of the use of feminist knowledge in praxis as related to women's empowerment and collective action and their implications for social transformation.

CONTRIBUTIONS OF FEMINIST THINKING TO UNDERSTANDING DEVELOPMENT

Feminist thinking and feminist activism have advanced the understanding of development in myriad ways. First, they challenge the conceptual frameworks and underlying assumptions of the prevailing theories and models of development, which have undermined the interests and needs of women and disadvantaged groups. Although the study of development has long been a preoccupation of different social science disciplines, its analysis for policy-making has been dominated by the economics discipline. Feminist research has revealed the masculine bias in the conventional models of economic growth and economic development. It has demonstrated the manner in which women's experiences and gender issues have been muted or made largely invisible in this influential body of knowledge.

Second, feminist scholars have developed alternative, gender-aware approaches to analyzing the development process. They have transformed development thinking and concomitant theories by incorporating women's voices and experiences. They have expanded methodologies for monitoring and assessing development policies, programs and outcomes to include gender-aware qualitative and quantitative methods.

Third, feminist practitioners have used feminist constructs in promoting social transformation. They have developed a set of practices and methods that were adopted in development plans and programs and institutionalized in policy and organizational

mandates as part of gender mainstreaming.¹ They have used feminist knowledge of development in raising consciousness among women, strengthening women's organizations and bringing gender issues to the broader social and political movements.

Overall, the feminist conceptualization of development has deepened our understanding of the meaning of development beyond material and economic aspects of people's lives. It reminds us that development progress is not just about increases in incomes and output; it also involves transformative changes in institutional and economic structures as well as in societal attitudes, norms and beliefs. Feminist thinking has enabled us to identify the channels for expanding the human freedoms of every woman and man and to bring attention to the important interconnection between development processes and the realization of human rights. Each of these points is explored in greater detail below.

Critique of the Influential Theories in Development Thinking

Feminist researchers are aware that the particular character of knowledge – in terms of the values it asserts and the underlying premises upon which it is built – critically shapes the foundation for development thinking and policy-making. It reflects the perception of social reality and interpretation of social phenomena by those who created the knowledge. These interpretations and perceptions get embedded in social science thought about development.

For example, the theories of economic growth and development are not expected to provide a full description of the real world but rather to give an abstract representation of the salient features of that reality. The dominant, conventional theories in the last 60 years have emphasized economic growth via capital accumulation, industrialization and increased integration into the global economy via trade, foreign investment and expansion of financial markets. The conventional models in which development theories are formally presented include the Harrod–Domar growth model, the Solow growth model, the Lewis dualism model, and the Chenery model of structural change, to name a few. They were constructed by their authors to focus on those issues which they viewed as 'important', namely growth in market output, and to abstract from what are deemed to be less important questions or issues by ignoring them. The latter include questions such as: are there costs and benefits that may spill over to other persons, how are preferences determined, and are there resources or inputs other than purchased goods and services utilized in the maintenance of labor force and reproduction of societies? These models also suppress in their analysis an important aspect of human activities, namely the social relations among individuals that underlie the decisions and transactions in which they are engaged.

Although the growth models were revised in the 1980s to incorporate some insights as to what makes development hard to achieve by highlighting the roles of technology, research and human capital in so-called new growth theories, they nonetheless retain the key factors that explain the differences across countries. In recent decades, new theories of development have emerged that focus on issues of poverty, human development, well-being and human rights. They have broadened the concept of development beyond an

¹ See Grown (2007) for discussion of gender mainstreaming.

emphasis on incomes and material needs to capabilities (access to education, health), opportunities, voice, dignity and human rights. The contrasts between the mainstream growth theories and their extensions on one hand and the capabilities and human rights frameworks in the other illustrate how the articulated hierarchy of what is salient or important gets manifested in the framing of the objective of economic development inquiry and concomitantly in the choice of simplifying assumptions.

Feminist thinking helps to expose the ideological content in the influential, mainstream models of economic development. For instance, the emphasis on economic growth and on per-capita gross domestic product (GDP) output as the goal to be maximized has made the increase in material output synonymous with the promotion of human well-being. The mode of analysis adopted in these influential development models focuses on the act of market exchange resulting in the transfer of resources or goods between market agents, and on the behavior of market prices, its main allocative device. Moreover, the characterized assumption of the average 'economic man' that underlies human behavior and decision-making suggests the centrality of the activities of men in defining the development process (Beneria 1995; Çağatay et al. 1995; Ferber and Nelson 1993, 2003; Kabeer 1994, 2000). Implicit in the 'economic man' is the articulated hierarchy of characteristics where self-interest dominates others' interests, economic rationality trumps other emotions as well as cultural values, and individualism overshadows connectivity with other persons.

Feminists also demonstrate that the development trajectory and the accompanying reorganization of production and distribution systems in the growth models are delinked from the social context in which they operate, and thus policies that they promote are detached from their social content (Ghosh 1994; Elson and Çağatay 2000). Questions regarding distribution and issues of power between transacting parties are avoided by placing, for instance, capital and labor on the same playing field. That is, workers are rewarded for their labor and investors or capitalists are rewarded for 'waiting' or 'resisting to consume now' so as to allow their unspent income (or savings) to be used in production. There is also avoidance of discourse relating to the exercise and consequences of other forms of power; for example capital over labor, as well as patriarchal power.

Feminist scholars such as Sandra Harding, Martha MacDonald and Julie Nelson point out that the power dynamics embedded in development research and knowledge-building have also to do with the methodologies used in gathering information and evidence. Social science disciplines that study development processes construct the 'conceptual practices of power' by defining the standards for 'good research' (Harding 1987, 2009). The methodologies or the ways in which questions of interest are translated into a plan of investigation or research also carry power. For instance, the methods deemed to be objective and scientific in mainstream development economics for testing the validity of development theories or evaluating the impact of development policies involve the use of quantitative statistical analysis. Other possible methodologies – such as detailed observation of certain groups of interest affected by a particular development policy or program – are considered to be prone to subjective interpretation or judgment and therefore not rigorous (MacDonald 1995). The standards set by the use of quantitative data and analyses are posited as objective benchmarks – that is, value-free – which uphold the quality of scholarship and analysis. In reality, the so-called objective methodologies are value-laden since such standards are typically used by the dominant paradigm to

‘discriminate against or empower specific social groups by interpreting the experiences of everyday life into categories of people that reflect prevailing political arrangements’ (Harding and Norberg 2005, 2009). Feminist work has revealed the potential gender bias in the collection of data, the method of empirical analysis and in the interpretation of results.

Feminist scholarship was not alone in challenging the notion of development as projected by the mainstream economic growth models. The latter were also challenged by development models that provided opposing views regarding the experiences of the developing countries. Representing the Marxist, structuralist and dependency schools of thought, the theories of underdevelopment, dependent development and uneven development emerged during the 1950s through the 1970s. They argued that the observed pattern of development can be attributed to the historical evolution of a highly unequal capitalist system which is dominated by power relationships between the developed and developing countries and within these countries, (the unequal power relations between the elite ruling class and the workers, farmers, and so on) (see relevant chapters in this book).

The neoliberal thinking on development reasserted its strong influence in academic discourses and policymaking in the 1980s. It combined the tenets of neoclassical economics and the classical growth models to promote free markets, free trade, privatization and deregulation. But this has been challenged intellectually in academic and civil society circles. Marxists, post-Keynesians, structuralists and institutionalists raised serious questions on the underlying premises, methodology and theoretical foundations of these models of development.² The experiences of developing countries that followed the neoliberal development model since the 1980s provided an important backdrop to these growing critical evaluations and challenges. The growing body of knowledge within heterodox school of thought demonstrated the adverse effects of unregulated trade and capital flows and market liberalization on growth, and constituted a major challenge to the conventional models of development. These studies also brought the issues of power and inequality to the forefront of the development discourse. Like the feminists, the heterodox and political economy thinkers stressed the institutional and social framework of development, specifically the social relations that underlie the nature of contractual arrangements in communities, markets, businesses and households.

Absent, however, in many of the heterodox perspectives on the social and economic systems is the unequal power relation whereby men are given higher status and privilege over that of women. Also absent in their discussion is the set of activities where exchanges and transactions are not guided by market prices. The activities performed for the purpose of human maintenance and social reproduction, such as gathering water, cooking meals, cleaning houses and care for the sick, elderly and children heavily rely on unpaid labor, which is contributed overwhelmingly by women. Some feminists have raised questions on the heterodox perspectives’ treatment of women and families, as well as on the role of unpaid labor. For example, feminists in the United States (US) and the United Kingdom (UK) challenged the role of domestic labor in the Marxist analysis of capitalism, leading to a number of debates (Gardiner et al. 1975; Hartmann 1981). Others

² They make use of the mark-up pricing approach, cost-push inflation models, Keynesian-based adjustment mechanisms, theories of risk and uncertainty, and the market failures approach in their analyses.

have argued for a closer examination of the social and material conditions of reproduction and the ways in which reproduction and production are related (Beneria 1979). They point out that the extent and terms of women's participation in the labor market is conditioned by their role in reproduction and human maintenance. These exchanges between feminists and economists from varied schools of thought have sharpened feminist thinking about development. Their influence is reflected in the varied feminist approaches that served as alternative views of development.

Feminist Thinking on Development

A key aspect of feminist thinking on development processes is the use of gender as a central category for understanding their nature, dimensions and impact. Gender, or the assignment of specific roles, rights and opportunities on the basis of sex, influences the manner of participation by women and men in the development process and affects its outcome. It underpins the performance of social, political and economic institutions, and so men and women experience their participation as well as the effects of development strategies and policies differently.

The growth of feminist scholarship including feminist economics has led to a greater realization of the potentials and limitations of social allocative mechanisms – for example, the market – and of the social relations that underpin the development process. Feminist analysis therefore demonstrates the varied ways in which social, political and economic institutions, such as governments, markets, firms and households, are 'bearers of gender' (Elson 1991). Hence, development cannot be viewed merely as a multitude of transactions between different market agents which involve the actions of buying and selling based on market price. Rather, they are socially created through a myriad of institutions – from the legal system enforcing property rights to social norms – involved in the process of development.

A crucial aspect of the social relations that underpin development processes that feminists give emphasis to is the power asymmetries between men and women. The unequal power draws from existing social norms, conventions and practices, manifests itself in different forms – for example, unequal access to resources, unequal bargaining power in household decision-making, unequal voice and participation in political and policy-making processes – and tends to be reproduced within the social, political and economic spheres, which in turn influences the outcomes of development processes (Çağatay and Ertürk 2004; Kabeer 1994; Beneria et al. 2015). Unequal gender relations are revealed not only in the division of labor and allocation of resources between women and men, but also in ideas, preferences, tastes, attitudes and representations regarding the traits and attributes of women and men. Gender has crucial distributive dimensions and influences the range of the opportunity set faced by the person, as well as the set of constraints s/he faces. It interacts with other structures of social hierarchy, such as class, ethnicity and race. For instance, with regard to land ownership and control, social values can affect considerably the terms on which land can be used for production and by whom, what to produce, or how it is transferred to others. The use of one's land or other resources is therefore constrained by more than price of inputs, available technology or legal restrictions. The nature and extent of constraint is likely, however, to be different between women in smallholding households and those with large landholdings or in the

wealthy class. The same is true between indigenous women or those belonging to ethnic minorities, and women belonging to the major ethnic group. Market forces do not necessarily address any of the resulting distributional imbalances that are embedded in these social relations during the process of development.

Feminist analysis highlights the fact that the interaction between gender relations and development is dynamic. The roles of men and women and the social rules that prescribe their behavior and rights are influenced by the changing economic, social, demographic and political forces that shape the development process. For example, as early as the 1970s, Ester Boserup (1970) argued that women's relative status in many parts of Africa and Asia declined under European colonialism. Her seminal work, *Women's Role in Economic Development*, brought attention not only to the contributions of women in unpaid domestic and household work as well as subsistence production, but also to the point that the promotion of private property rights and land ownership has deprived women of land use rights. Accompanying the promotion of private property was the belief that men were superior farmers, thus encouraging the introduction of better farming methods and agricultural techniques and cash crops to men, and leaving women with traditional low-yield methods for growing subsistence crops. Gender relations as a result has evolved alongside economic development in a manner that puts the responsibility of money incomes squarely on men, with women (and children) becoming dependent on the male breadwinner's earnings (Floro and Meurs 2009).

The process of engendering the study of development entails the expansion of the scope of inquiry beyond the market activities to include those performed in the sphere of social reproduction and human maintenance. Activities involved such as cleaning houses, caring for the sick, children and elderly, washing clothes, preparing meals, and so on, constitute a significant aspect of human provisioning and are clearly vital for the functioning of economic and social systems, and yet they are ignored in development discourses. Gender relations permeate development processes through the interconnected spheres of market and non-market activities (Floro 1995; Bakker and Silvey 2008; Beneria et al. 2015). For example, the norms governing the responsibilities for care and the household responsibilities and the value (or lack thereof) given to the requisite labor effort are constantly drawn upon in determining the terms of women and men's participation as citizens, workers, consumers, borrowers, and so on. The fact that women spend long hours caring for the physical needs of others makes it more difficult for them to do what they want to do in other areas of life, such as employment.

The path-breaking early work of scholars and the growth of the women's movement since the 1970s have inspired others to advance further our understanding of the nature of unpaid work. In response to the persistent invisibility of many of women's contributions, a collective endeavor by scholars, women's groups and the United Nations (UN) has emerged in order to make the totality of women's work visible to society in general and policymakers in particular. Referred to as the 'Accounting for Women's Work Project', their efforts collectively challenged the deeply rooted biases in the system of national accounts (SNA), labor-force statistics and the underlying conceptual, theoretical and methodological conventions regarding unpaid work (Beneria et al. 2015).

The importance of measuring unpaid work gained further support from a broader group of feminist scholars, development as well as time use researchers, who since have developed new conceptualizations and measures of the economy inclusive of paid

and unpaid labor involved in human provisioning. They analyzed the interconnection between human maintenance, social reproduction, and the process of economic growth and development, thus accentuating the relevance of understanding and monitoring changes in the level and distribution of unpaid work (Beneria et al. 2015).

Feminist methodologies have also evolved alongside its theoretical and conceptual contributions. They address questions of interest such as gender division of labor, poverty, the gender gap in education, earnings, unpaid work, caregiving, bargaining power, women's empowerment, well-being, and so on (MacDonald 1995; Berik 1997; Grappard 1999). Although feminists do not have a unified approach to development, they share a commitment to the design and use of methodologies that avoid the male bias. They deconstruct categories such as women and gender, and reformulate methods of collecting data. Since many dimensions of power relations and well-being are hard to quantify and many aspects of women's experiences are difficult to capture in statistics, feminists see the relevance and usefulness of qualitative methods, such as participant observations, focus-group discussions, case studies, and so on, alongside the use of quantitative tools.

As mentioned earlier, the approaches developed by feminists in articulating women's experiences and gender relations are as diverse as the schools of thought within the development discourse. Feminist analyses, for example, are influenced by neoclassical economics, institutional economics, Keynesian economics, social economics, structural economics, Marxist economics and Post-Keynesian economics. The rich and diverse feminist approaches to development are also shaped by the socio-political circumstances and economic conditions of the periods from which they emerged, a point that I examine in greater detail below.

FEMINIST APPROACHES TO DEVELOPMENT

The unravelling of development problems and the political fervor of the 1970s and 1980s, particularly the growing social movements and voices of protest from vulnerable and disadvantaged groups, served as fertile ground for feminist thinking around development issues. Varied efforts were undertaken by scholars, activists and practitioners to identify the source of failure of development models and their recommended strategies in addressing the problems of persistent poverty, hunger, increasing gaps between the rich and poor, stagnant growth, the debt crisis, and so on. At the same time, they wanted to deepen their understanding of women's social and economic conditions that have long been neglected in development discourses and in policy-making. The failure of the development strategies recommended by conventional models of development to improve the living standards raised questions regarding their impact on women's lives. They underlined the need to develop a framework in which the relations may be reconfigured concerning claims regarding resource use, access to goods and services, opportunities and rights. The inadequacies of mainstream development models raised questions among feminist scholars, women advocates and activists on how to frame their concerns in the context of development.

The responses to the invisibility of women's experiences, contributions and needs in development agenda, strategies and policies were formulated within three broad frameworks, namely: women in development (WID), women and development (WAD) and

gender and development (GAD). These frameworks reflect different understandings of both feminism and development based on: (1) the ideological perspective through which the selection of the framework is made; (2) the nature of women's experiences and the forms of subordination and patriarchal control that they suffer; and (3) their vision of how the development process can proceed to address women's needs and gender inequalities. The set of issues that feminists take up within each of these broad frameworks involves taking on a particular viewpoint and its corresponding assumptions and then setting the boundaries in which women's issues and gender concerns are integrated. In some cases, women's issues are localized in a given setting, say, the household domain, such as women's access to technology or the gender division of labor in the farm. In other cases, gender concerns focus on particular forms of gender inequity, such as health and nutrition, earnings or education gaps. Other feminists raise questions of power which are embedded in economic and social institutions such as markets, caste systems, inheritance laws, and so on, and critically illuminate them in their analysis of development.

The work of Ester Boserup (1970) laid the foundation for the large body of work and sets of practices that sought to integrate women into the development process, referred to as women in development (WID). Her book, *Women's Role in Economic Development*, challenged the notion that capital accumulation, enhanced trade, modernization and economic growth benefit everyone, including women (Boserup 1970). She argued that women had been excluded or marginalized in the development process as they were deprived of having access to land rights, education, training and technology during both the colonial and the post-colonial periods. Colonial administrators, governments and policy-makers simply could not conceive of women being farmers in their own right, even though women in Africa and South-East Asia have significant roles in agricultural production. This lack of access to resources meant that while men's productivity increased, that of women did not. At the same time, the perceptions of employers regarding women's capacities and work commitments alongside women's lack of access to education and training limited their participation in the process of modernization.

The approach for feminizing development within the WID framework involves the integration of women into the development process, thereby making them both participants and beneficiaries. It stems from the WID analysis of the development conundrum as having the benefits of modernization and economic development mainly accruing to men; women were often excluded or marginalized from new productive processes and growth of the economy. The proponents of the WID approach therefore sought to ensure that development policies and projects recognize women's roles in production and provide them with access to resources, and that the opportunities for increasing productivity and for employment be made available to women.

The WID framework supported the establishment of women-only projects by governments, non-governmental organizations (NGOs), international institutions and donor organizations so that women's needs could be met. Since the range of women's interests and needs is wide, the WID framework's call for the integration of women into development allowed varied emphases and areas of focus. The generality and broadness of the framework and the lack of any strong and explicit philosophical foundation have made it open to translation as well. Young (1997) pointed out that the term 'WID' was initially used by liberal feminists and female development scholars in the United States who wanted to ensure that women are in the mainstream of economic, political and social

life. Thus, many proponents of the WID approach pushed for legal reform, amendments and equal opportunity for women. Their counterparts in some government ministries, donor agencies and development practitioners did not necessarily question the strategies that were recommended to the developing countries by the mainstream or conventional models of growth. These recommended actions focused on meeting women's material needs and improving their status through better access to credit, land and labor markets and increased productivity, rather than identifying and addressing structural factors or causes that maintain unequal positions of women and men, particularly those that arise from the character of the development process.

The last point brought dissatisfaction and disagreement from some feminists regarding the effectiveness of the WID approach in addressing women's strategic needs and persistent gender discrimination and inequalities. They view the largely uncritical stance of the WID framework to be problematic, since women's disadvantaged position and their subordination are not solely the result of cultural practices but primarily of the way the reorganization of production processes creates insecure and precarious types of employment (Sen and Grown 1985; Elson and Pearson 1981). They also point out that WID tends to conceptualize women as a homogeneous, undifferentiated group whose condition is determined by their sex. These feminist scholars and activists raised questions about the type of development that women are to be integrated into. Beneria and Sen (1981, 1982) argued that the key problem brought about by the prevailing patterns of development is women's subordination, rather than marginalization and exclusion. The subordination of women takes different forms with the increasing dominance of the capitalist system worldwide. Women's disadvantages in the labor market are manifested in plantations, export-oriented industries, small agriculture, and so forth.

In the analysis of the growth of female employment in export factories, Elson and Pearson (1981) pointed out the interplay of conflicting tendencies brought about by capitalist modernization that involves intensifying, decomposing or recomposing existing forms of gender subordination. Feminists including Belinda Bozzoli (1983), Norma Chinchilla (1991), Michele Barrett (1980), Heidi Hartmann and Ann Markusen (1980) and Julie Matthaei (1996) explored the issue of class relations and divisions among women by adopting the historical material approach to understanding patriarchy. Their particular approach, later referred to as women and development (WAD), laid bare the laws of tendency that constitute the structure of patriarchy and follow its development in and through social classes, cognizant of the fact that inequalities exist not just between men and women but also within other social relations in terms of class, race, ethnicity or caste.

Feminists from developing countries enriched the WAD framework by demonstrating that women's problems are not only solely created by marginalization or lack of equal opportunity but are also the result of systems of exploitation – feudal, semi-feudal, capitalist, semi-capitalist – during the colonial and post-colonial periods (Wallace and March 1991; Antrobus 2004). They brought attention to the historical legacy of colonialism and the bias imbued in the Western view of development. For example, Pagaduan (1987), Francisco (1987), Antrobus (1989) and Ghosh (1994) examined the conditions of women in the Philippines, Latin America and the Caribbean as well as India as determined by the development strategies and economic policies pushed by the traditional and neoliberal models. The WAD approach was not only concerned with meeting women's

practical needs but also attempted to promote political consciousness about international dependency relations and the social-economic exploitation that affect both women and men. It questioned the mainstream concept of development and introduced a broader framework of analysis that acknowledged the structural and political barriers to women's participation as well as the extent to which economic development, far from excluding women, actually benefits when women's time, labor and sexuality are exploited. It also confronted gender issues by drawing attention to the asymmetric relations between men and women, and the implications for development policy and practice of women's multiple roles and their primary role in social reproduction.

The nuanced analysis of women's issues presented in the WAD approach led to a crucial shift in focus from women to gender, and from the question of integration to the transformation of the development process itself. This was encapsulated in what became known as the gender and development (GAD) approach. The GAD framework highlights the need to understand the type of development process being pursued and its varied effects on women's lives through their reproductive and productive roles as well as gender relations. It conceptualizes gender as a dynamic social construct which, along with the economic system, structures the options available to women and men. Because of gender biases and patriarchal norms, women have had fewer rights and opportunities than men. Moreover, women's experiences are varied, as shaped by the interplay of social, economic, demographic and political factors. And so, development processes are likely to yield different outcomes for women. GAD advocates therefore aim to address the bases of inequalities between women and men and redistribute the power inherent in gender relations. They regard gender-aware policies and interventions as crucial in engendering the development process and at the same time help to modify socially constructed gender roles and relations (Moghadam 1998).

The GAD approach not only examines the economic processes and political structures from a gendered lens but is also concerned with the expressions of women's agency, including the emergence of women's organizations and networks. The conscious efforts by GAD feminist activists and practitioners to incorporate the voice and lived experiences of the most disadvantaged group, namely poor women, has made the question of means and effectiveness of leverage in raising their concerns an important one. Questions such as how development can promote gender equality, and which obstacles or constraints need to be overcome, have brought about numerous debates and discussions among development researchers, feminist scholars, activists and women's organizations, some of which took place during the four UN International Conferences on Women between 1975 and 1995. Several were convinced that social and economic change towards gender equality requires not just challenging existing theories and methodologies, but also women's empowerment that necessitates women's mobilization and consciousness-raising by women's groups and feminist organizations (Moghadam 1998).

As with WID, the GAD approach encompassed a broad range of gender concerns: from women's reproductive rights to gender gaps in education, health and nutrition, earnings, asset ownership, access to credit, political participation, technology as well as violence against women, and so on. It brought together feminists with diverse backgrounds, ideologies and experiences. The theoretical discourses on development and feminism reflect the influence of various schools of thought including liberalism, post-colonialism, postmodernism, Marxism, socialism and post-structuralism. They

examined and attempted to answer questions regarding scientific inquiry, the nature of women's oppression, the impact of sexuality, identities and empowerment (Berik 1997; Harding 1987; Ferber and Nelson 1993; Agarwal 1997; Beneria et al. 2015).³ Some GAD proponents highlight women's productive contributions and emphasize the losses to economic efficiency when women are marginalized. Others insist that gender equality and women's empowerment require bold, gender-aware development strategies and policies that correct the inequality of opportunities and the inequities in access to resources, work burden, political voice and representation. This particular view within the GAD framework emphasizes the need for strategies that can bring about deeper transformations and socio-economic empowerment of women in societies.

It is clear that the GAD approach is not static; its evolution from the 1980s onwards has been shaped by gender concerns brought about by the rapid globalization and attendant economic restructuring processes. Several feminist proponents of GAD critiqued the neoliberal economic policies that dominated and guided the process of development (Çağatay and Ertürk 2004; Bakker and Silvey 2008; Ghosh 1999; Jackson and Pearson 1998; Karamessini and Rubery 2013). The GAD approach also received attention among some mainstream economists and development practitioners who found it necessary and relevant to address the calls for change made by women's groups worldwide. But they provided a different interpretation of GAD that does not challenge the mainstream or conventional view of development and is in line with their ideological beliefs (Palmer 1991; Haddad et al. 1995; World Bank 2006). For example, Palmer (1991) and Haddad et al. (1995) demonstrated in their work how resources, especially female labor, may be allocated between sectors in a skewed and inefficient manner due to various constraints that arise from gender roles and discrimination against women. The implication for development policies is targeted at enhancing the efficiency of markets and freeing up women's labor in unproductive (non-market) sectors so that they can better participate in more productive areas of the economy, for example export-oriented sectors. Hence, there is a need to exercise caution in making generalizations about the GAD approach, particularly as it has evolved into varied forms throughout the 1990s until the present. The next section examines the key factors that have shaped some of these GAD approaches in the last 20 years.

RECENT CHALLENGES AND PERSPECTIVES IN FEMINIST THOUGHT

There are several developments, since the 1980s, which provided an impetus as well as challenges to feminist thinking on development issues. One was the growing voice of feminists from the South who have been part of the women's movements worldwide. They brought new perspectives and varied insights on women's experiences and gender relations, which reflect the specific historical, social and material conditions of poor women in developing countries. However, there were also tensions and debates among

³ For a discussion of these schools of thought that have influenced the discourses on feminism and development, see Petersen and Lewis (1999).

feminists and women activists, particularly between North and South, primarily on what gender equality means, what their vision of development is, and what the roadmaps or strategies are for attaining it.

Another important factor that shaped feminist thinking and the larger debates on development was the accelerated economic globalization and rise of neoliberalism that led to uneven patterns of growth and the widening of inequalities.⁴ With strong corporate support and a theoretical base in neoclassical economics, governments such as those of the Philippines, Chile, the US, the UK and Germany advocated trade and capital-market liberalization, deregulation and privatization as the best strategy for attaining growth, peace and democracy. The growth-model type of development based on free markets took hold in many developing countries from the 1980s through the advice of Western-trained economists and the vigorous push by the International Monetary Fund and World Bank through the loan conditionalities imposed on indebted nations.

A third factor is the 'mainstreaming' of the GAD framework in terms of its interpretation and its operationalization. A number of mainstream economists have brought about their own interpretations of GAD, some of whom have been influenced by institutional economics. Recognizing the role of norms and values in development processes, they highlight the gendered barriers that exist in attaining the neoclassical goals of efficient allocation of resources and economic growth. Gender mainstream efforts were also operationalized and implemented in development institutions, governments, and donor agencies (Grown 2007).

A fourth factor was the development of the human development and capabilities approach based on the work of Amartya Sen and the engendering of the human rights concept in the 1990s. These provided the possibility of having an overarching framework for discussing feminist concerns and feminist visions of development. It is easy to envision, within the human development and capabilities approach, that gender equality is both an end in itself and a means of attaining the goal of human development for all. Similarly, feminists are able to expand the meaning of human rights to include women's rights, and thus the promotion of human rights is a useful framework for addressing gender inequalities. I discuss each of these developments below.

Post-Colonialist Influence in Feminist Thinking

Throughout the evolution of feminist thinking on development, debates and arguments among feminist scholars and activists have taken place over what constitutes social progress or human development, and over the best way of achieving it. Feminists from Africa, Latin America and the Caribbean as well as Asia sought to understand the dynamics of gender within the context of their countries, whose socio-political and economic structures have been shaped by their colonial legacies. Their analyses, which were influenced by post-colonialist, Marxist and structuralist thought, provided feminist viewpoints on the interconnection between gender and development that are different from those articulated by Northern feminists. Since as far back as 1975 at the start of the UN Decade for Women, tensions have risen between Northern and Southern feminists as

⁴ See Broad (2002), which presents the broad spectrum of views on economic globalization.

they have discussed and debated over the priorities and direction of economic development (Peake and Trotz 2002; McIlwaine and Datta 2003).

Southern feminists constructed their own development agendas and interpretations of feminism based on the historical pattern and trajectories of their countries and their particular experiences of patriarchy. Women's circumstances in Latin America, Africa and the Middle East cannot be separated from their colonial history and the existing geopolitical conditions (Ahmed 1992; Bozzoli 1983; Mills and Ssewakiryanga 2002; Peake and Trotz 2002; Wallace and March 1991). For example, feminism in the Middle East region, as Ahmed (1992) pointed out, was closely associated with the struggle against oppressive forces of colonialism by the West. These struggles have shaped the development of feminist thinking and movement in the region, which called for indigenous forms of feminism that are not affiliated with Westernization. In colonial African societies, new forms of gender inequalities were brought about by the growth of market economies, the mechanization of agriculture and the privatization of land rights. They were interspersed with forms of patriarchy in the pre-colonial period, resulting in mottled forms of gender relations (Bozzoli 1983).

Neither can feminist thinking, say in Africa, be treated as homogeneous. Zein-Elabdin (1999) noted that there are significant historical and cultural contrasts between women and men in Ghana, Somalia and South Africa, which require judicious application of feminist concepts and development analysis in each country. Southern feminists have also brought attention to the need for understanding the local interpretations and meanings of gender and feminism, interpretations that can be in contrast to the meanings given by Northern feminists. For example, Mills and Ssewakiryanga (2002) demonstrated how a Ugandan vision of gender issues is more appropriately focused on consensus rather than conflict.⁵

Similarly, the feminist movements in the Latin American and Caribbean region grew out of the broader political struggles against post-colonialism and Western models of development. For instance, the feminist movement in Chile during the late 1970s and early 1980s fought against the US Central Intelligence Agency (CIA)-backed military dictatorship, against human rights abuses and adverse effects of capitalism, for political participation and for the sharing of household tasks (Deere 1987). While Northern feminist scholars have criticized conventional models of development for their male bias, feminists from the South also critiqued the dominant feminist theories emanating from the West for their cultural biases.

The emergence of a Southern-based organization called Development Alternatives with Women for a New Era (DAWN) at the UN Conference on Women in Nairobi provided an important vehicle to articulate the views of women from the South to challenge and change the discourse on women and development (Antrobus 2004). By locating women's experiences of patriarchy and development in the neocolonial context and the macroeconomic policies that reflected this post-colonial relationship, Southern feminists enriched the analytical frameworks of WAD and GAD and brought the voice of poor women in developing countries into the debate and discourses on women's

⁵ Some claim that certain terms in the language and abstract concepts used in Northern feminist discourses mean little to women activists and gender advocates in the South, and so it is hard to relate them to their own experiences (McIlwaine and Datta 2003).

issues worldwide. The work of DAWN and other similar organizations in Africa, Latin America and the Caribbean and Asia gave emphasis to overcoming poverty and injustice, and meeting basic needs while at the same time addressing unequal gender relations.⁶ Their analyses of development took into account the diversity of women's experiences in the South on the basis of their class, ethnicity, race and nationality.⁷ It provided the global women's movement with tools for examining the gender dimensions on a wide range of development issues: from debt crises, neoliberalism, trade, deteriorating social services, food security and poverty to migration, militarism, violence against women and population.

Feminism in the Era of Globalization

The acceleration of globalization has served as a core defining issue, which challenged and led to the deepening of feminist ideas and analyses of development. Significant changes since the 1980s have taken place in international trade, commerce, finance and ideology regarding what constitutes development progress. The dominance of neoliberalism and the uncritical endorsement of market-liberalization policies afforded little recognition of the adverse consequences and social costs that were brought about by these policies around the world. In the last 25 years, feminist activists and scholars have examined how the forces of globalization have created tensions and contradictions and at the same time produced spaces and opportunities for challenging gender norms. It became clear that the critical gender concerns and the adverse distributive consequences of the emerging dominant development strategy being pursued by governments in many countries worldwide required examination and discussion, and the possibility that the proposed policy actions can foster inequality and gender biases needs to be considered.

The growing body of feminist research on economic globalization, and especially on structural adjustment programs, has been instrumental in identifying the significant costs of these development strategies for women and the gender blindness of economic policies. As pointed out in the United Nations Development Fund for Women (UNIFEM) (2000) report and by Grown et al. (2000), economic policies and development strategies in general are seldom, if ever, gender-neutral. Feminist economists have identified numerous gender biases in structural adjustment and macroeconomic stabilization policies.⁸ For example, these policies have failed to bring about higher growth rates that could have potentially benefited all segments of the population including the poor and the marginalized groups. In the era of globalization, the growth rates of many countries in the world economy have been on average lower than those in the previous decades, while existing inequalities across rich and poor countries, across skilled and unskilled workers, across men and women, and across households within countries, have risen. The world economy has become more prone to financial crises, as short-term capital flows now move from

⁶ For instance, ISIS International based in Santiago Chile provided channels for expressing the diversity of the women's movement and distributed the research produced by Latin American women researchers, historians and political scientists on women's issues and gender concerns (Portugal 2004).

⁷ Some WAD and GAD proponents from the South even avoid using the word 'feminists', given its association with white, middle-class women from the North (Antrobus 2004).

⁸ See Beneria (1995), Çağatay et al. (1995), Çağatay and Ertürk (2004), Elson (1991), Ghosh (1994, 1999), Elson and Çağatay (2000) and Beneria et al. (2015), among many others.

one country to another with lightning speed and wreak havoc in the lives of millions, as was witnessed during the recent global financial crises. The result has been increased economic insecurity and vulnerability, often leading to social dislocation and violence.

The empirical evidence from around the world shows that women have had diverse experiences in terms of how participation in the market economy affected their lives. But the evidence also shows that despite these variations, their experiences were almost always different from those of men. Feminists began to reflect on these phenomena; they challenged prevailing theories of knowledge and practice regarding development; they continually exposed the biases and deep-seated prejudices in the analysis of globalization phenomena. They demonstrated that development strategies and economics can maintain and even reinforce gender asymmetries and biases if these are not systematically and holistically addressed in policy formulation and implementation.

Feminists working in development have since formed broad alliances across the North and South divide against economic, social and cultural injustices, even though tensions and disagreements remain (Jain 2004). At the same time, struggles within national boundaries pressed for a deepening of the GAD approach to address the gender inequalities that women face in their societies. These struggles also demand a broadening of feminism so that it no longer refers to a Western-influenced, hegemonic set of ideas, but rather takes a series of forms operating at different scales and in different contexts.

Mainstream Interpretation of GAD

The growing influence of feminist thinking in development discourses initially brought about resistance in government ministries, national and international agencies, multilateral institutions and non-governmental organizations. Despite the mandates and international commitments made, there was reluctance to integrate women and to address gender issues in the development process. This reluctance eventually gave way to the realization that gender disparities remain in all countries, despite economic progress. Moreover, socio-economic shocks have brought about setbacks in women's progress, jeopardizing some hard-won gains. Policymakers, donors and the staff of multilateral organizations also realize that the meaning of gender equality and women's empowerment can be modified and redefined to fit into a pre-existing development agenda. For instance, women's empowerment can be achieved by releasing their potential and expanding their choices that lead to greater productivity and hence greater contribution to economic growth. There is also a need for reforming institutions to foster new job opportunities, promote investment in women's education and for investments in basic infrastructures to reduce women's workloads (World Bank 2001).

To some extent, this interpretation of GAD has been instrumental in assessing the impact of gender inequalities on development concerns and facilitating gender mainstreaming. However, the important point raised by GAD feminists – that women's empowerment requires systemic transformation not only in household relations and social norms but also in markets and policy-making institutions – has been diluted. In some cases, the process of gender mainstreaming, which is aimed towards the attainment of gender equality and women's empowerment, has become a mere technical procedure and route comprised of tools, checklists and training (Mukhopadhyay 2004). Although many government agencies and national and international institutions have policies to

incorporate gender and development in their agendas or plans, progress remains limited due to limited budgets and staff. Attitudes that legitimize women's subordinate roles, and mandates focused on women's productivity in support of market-led efficiency, or on welfare, continue to persist. Thus, various efforts in gender mainstreaming have reduced what is fundamentally a political process aimed at social transformation into a technical exercise comprised of checklists, tools and training (Grown 2007). Rather than treating women's overall well-being as an end in itself, women's labor, skills and productivity potential are viewed as means that can be tapped further to increase GDP growth.

Ultimately, what is given up in this mainstream interpretation of the GAD approach is a deep understanding of the interconnection between the functioning of markets and the underlying social rules and practices that systematically reproduce different opportunities, constraints and outcomes for women and men. It mutes any discussion of gender relations that permeate the markets where women are being integrated, and ignores the linkages between the sphere of market economy and that of social reproduction. As a result, the applications of this type of GAD approach rarely challenge the goals of economic growth; it has weakened or silenced the call for any structural change in or transformation of socio-political and economic systems that is required for the achievement of gender equality. Its scope of inquiry tends to be confined to those gender concerns that essentially fit into the overarching goals of productivity and economic growth.

Another type of GAD revision is of a political nature, this time against the significant progress in the promotion of women's rights. Sweetman (2013) argues that GAD has become depoliticized in the eyes of many feminists working in the women's movements worldwide. For example, the development agenda that has been operationalized in the international arena continues to focus on women's rights and gender inequality only when they are perceived to be important in achieving other goals, such as reduction in fertility, better children's nutrition, greater productivity and higher economic growth. There is an underlying premise that such goals automatically extend the choices of women and girls to determine their own lives. But what gets ignored are important facets of human development that require the elimination of restrictions affecting women's participation in the community, in economic life and in making decisions about their lives. Moreover, the support for international, national and local women's movements that are developing political responses to the crises in their respective settings tends to wane and be subject to budget cuts (Sweetman 2013). The recent budget cuts in the UK and Spain have affected women deeply, as shown in analyses of the UK austerity plan and the recent Spanish economic crisis (Elson 2012; Beneria et al. 2015).

Emergence of the Human Development and Human Rights Frameworks

Over the past two decades or so, the work of Amartya Sen on entitlements, capabilities and human development as well as the concept of human rights embodied in the 1948 Universal Declaration of Human Rights (United Nations 1948) manifesto have drawn the attention of several feminists. The ensuing feminist approaches that developed within the human development agenda and the human rights agenda can be viewed as part of the broader efforts to find an overarching framework that clarifies a development goal that is best served by all human activities in which gender equality is embedded, and that allows the conceptualization of social institutions such as markets as bearers of gender.

The capabilities and human development framework is built on the work of Amartya Sen, who argues that the person's capability to function is what really matters (Sen 1984, 1999). In Sen's view, any epistemology, methodology and policy discussion regarding development requires a richer understanding of what human systems, and hence the development process, should be concerned with: namely, enhancing the life each and every person leads and the freedoms that they can enjoy. A key feature of the capabilities framework that is relevant to engendering the analysis of development is its assessment of the processes within the system of entitlement relations (Nussbaum 2002; Robeyns 2003). The latter includes political systems, social structures, market production, distribution and exchange, other institutional arrangements, private and government or public transfers, as well as the sphere of social reproduction through which people also articulate and claim their entitlements.

The freedom of choice in the capabilities and human development framework has material preconditions in whose absence there is merely a 'suggested feasibility' of choice. In other words, it makes the distinction between 'real choice' and 'feasible choice', the latter being confined to the abstract realm. For example, a woman who has a feasible choice to engage in a business of her interest simply cannot do so due to social conditions and economic circumstances that make it very difficult or impossible. Although she has the freedom in the sense that no law prevents her, a woman may actually be prevented from enjoying that freedom by prevailing patriarchal norms, the enormous burden of caregiving and household responsibilities, or by simply lacking assets or access to affordable credit.

This makes the issues of power relations and distribution central in the human development framework. Having a broader range of options to choose from has as much to do with the distribution of land, wealth and income as it does with the nature of social relations that determine the real opportunities of women and men. It also means that gender inequities that reduce women's access to resources and limit their ability to convert resources into functionings will require governments and societies to devote more resources to those who encounter obstacles from traditional hierarchy or prejudice (Elson 2002).

Although the concept of entitlements has been defined by Sen at the level of the individual, he alluded to the notion of an aggregate system of economic and social relations by referring to a 'network of entitlement relations' (Sen 1984). This point is emphasized by Nussbaum (2002), Robeyns (2003) and Vizard et al. (2011) in their work on the gender dimensions of the capabilities approach. Women, for example, may have low levels of literacy because of entitlement failures due to low levels of money income, prevailing social norms that favor boys over girls in sending children to school, low priority or level of support provided to education by the government, or a combination of these. Such entitlement failures can lead to capability deprivation or the inability of women to be more skilled in the activities that they engage in and to be well-informed participants in decision-making within and outside the household. A one-sided focus on income poverty of women merely obscures the other important facets or causes of entitlement failures that they face.

The tenets of the capabilities approach serve as foundations for the broader human development framework introduced in the United Nations Development Programme's Human Development Report in 1990. The notion of human development puts the basis for understanding and assessing development firmly on how well it expands the capabilities of all people: women, men and children. This primary concern for the well-being of

all people makes equity a fundamental policy objective and therefore requires the understanding of social relations including gender relations, as well as the monitoring of distribution and measures of deprivation (Fukuda-Parr 2003, 305). In this sense, the human development priorities echo what feminists in the WID, WAD and GAD traditions have collectively raised: removing restrictions such as illiteracy, poor health, unequal opportunities in business, lack of command over resources, lack of voice in decision-making, social and political oppression.

The idea of agency in the human development framework is also about demanding rights in decision-making, and this resonates with the concerns of feminists. This can be individual in form – for example, asset ownership can empower women to demand their rights within the household – or collective in nature, as in in the public sphere and political processes (Fukuda-Parr 2003). As feminists and women activists have realized since the 1970s, the attainment of gender equality requires collective action and the process of forming associations, making alliances and generating public debates. Democratic governance, through political institutions that expand the voice of women and ensure the accountability of decision-makers, is considered an important condition for promoting human development.

This framework has some overlap with the neoclassical-institutionalist interpretation of the GAD agenda. Women's poverty in the context of human development goes beyond the lack of income and refers to deprivation in capabilities and participation in economic life and in decision-making. However, the human development approach by feminists, in contrast to the mainstream interpretation of GAD, emphasizes inequality as a core development issue. It essentially requires a deep understanding of the factors that maintain or reinforce inequality and brings attention to the gender dimensions of inequality that would otherwise remain invisible or neglected.

Another important framework has emerged in the 1990s and early 2000s that provides a fresh, overarching approach to feminists for understanding development processes and a basis for women advocates working on social and gender justice and engaging with the law, the courts and policy-makers. The recognition of women's rights as human rights, and of violence against women as a violation of women's human rights, was first formally acknowledged at the UN Vienna Conference on Human Rights in 1993 and reiterated at the 1994 UN Conference on Population in Cairo as well as the 1995 Fourth World Conference for Women in Beijing. This recognition of women's rights is significant in legitimizing many feminist concerns. The human rights framework, as Jain points out, became a 'transnational field that has many positive values for women' (Jain 2004, 137). Since then, it has been used by feminists and women activists in the South to challenge patriarchal systems and to promote women's rights.

The issue of human rights goes beyond the individual level however as it involves scrutiny of the aggregate economy, both within nation-states and in the global economy. The realization of human rights requires that resources be allocated and used in a manner that enables their fulfillment, which makes the economic development discourse an essential element of the framework.⁹ The Declaration of Human Rights also makes it

⁹ Elson (2002) points out that the rights to use one's endowments in order to produce for one's own consumption or for sale in the market, and the rights to goods, service, and monetary transfers from the state, comprise a system of entitlement relations. In other words, the concept of entitlements encompasses

clear that governments and other organizations as well as individuals have an obligation to contribute to the creation of an enabling economic environment for the enjoyment of human rights (Elson 2002). Development strategies and economic policies have a significant impact on the realization of economic and social rights of women and men, and the assertion of one's rights calls attention to the justified and urgent claims that people have to dignified treatment, regardless of the condition or environment they are in, by virtue of being human (Nussbaum 2002; Balakrishnan and Elson 2011).

The human rights framework brings to the forefront of development discourse not only the manner of allocating resources but also the distribution and the distributive aspects of social relations, such as gender, which are embedded in development processes. More emphatic than the human development framework, it significantly alters the way one thinks about issues of coordination of human needs, and situates the discussion of efficiency in meeting the fundamental goal of human provisioning and the fulfillment of human rights. This approach inevitably requires a system of setting priorities for resource use and a framework for evaluating potential trade-offs between the attainment of different needs of women and men (Elson 2002).

Both the human rights framework and the capabilities and human development framework cover a comprehensive domain of activities that encompass those pertaining to the economic provisioning for human needs. Both are complementary in a number of ways. The human rights language provides a more authoritative and urgent discourse and identifies the deprived as active claimants of rights while the capabilities and human development provides some concept of a basic social minimum so that all people, both women and men, are actually able to do and to be, thus leading a life worthy of the dignity of the human being (Elson 2002).¹⁰ The human rights approach, on the other hand, provides an alternative, normative criterion for judging the effectiveness of social institutions, such as markets, cultural norms and other arrangements for allocating resources and economic policies to the extent that they help to ensure or satisfy the minimum essential levels of economic and social rights of women and men. Both the human rights and capabilities approaches treat the well-being of each and every person – women and men – as the end and not merely as a means to an end. They criticize the view and the practice of treating women, for example, as adjuncts to men and their labor as a resource for reproducing and maintaining the labor input in market production processes. The reasoning used in both frameworks would therefore involve weighing the alternative uses of resources and manners of allocation in terms of meeting the essential level of economic and social rights of each and every person (critical threshold), and to guarantee the substantive freedoms that the members of that society can enjoy.

A combined human rights and capabilities feminist approach can help to deepen the understanding of development processes and social, political and economic institutions by articulating the ways in which opportunities, choices and constraints are influenced by their social location and the nature of power relations. Its premises regarding the connections between freedom, rights and human well-being enable

both production and distribution processes, and entails both market transactions and provisions made by governments. It applies just as much to the fundamental rights of women as to those of men.

¹⁰ There are several gender indices developed by various institutions, based on the capabilities approach. See Van Staveren's (2013) review of the various indices of gender equality and women's empowerment.

the combined approach to avoid the distortions and biases entailed by androcentric theorizing and by the preoccupation on material output and incomes. The resulting framework in fact challenges gender, race and class privilege that influence development outcomes.

The combined feminist, human rights and capabilities approach extends the boundary of economic analysis to include a deeper examination of the nature of the constraints that restrict the person from realizing their economic and social rights. It considers the fulfillment of rights of women and men as the basis for evaluating economic and social progress and the effectiveness of economic policies. The approach has immense potential that can be developed for the integration of gender into economic analysis in a manner that is both transformative and empowering.

CONCLUDING REMARKS

The above discussion identifies the main contributions of feminist thought to the understanding of development processes. It explores the varied feminist approaches that have evolved in recent decades, reflecting different schools of thought, perspectives and experiences of patriarchy by women in different contexts and settings. Building on the work of other scholars who have reviewed the WID, WAD and GAD approaches, the preceding section also explores the pertinent developments and forces at play that have posed serious challenges to feminists in terms of grappling with rapid globalization, diversity of women's experiences and mandates toward gender mainstreaming. At the same time, there are new developments such as the introduction of the capabilities and human development framework and the human rights framework, which provide fresh perspectives to understanding development through a feminist lens.

A final point worth mentioning is the dialectical relationship between feminist knowledge and women's collective action. The efforts and advocacy work by women's groups, women's networks and the broader social movements which they are part of, have been instrumental in bringing the goals of gender equality to the forefront of feminist knowledge construction and in policy discourses. Throughout the 1970s and 1980s, the growing women's movement in many parts of the world grappled with the ongoing development, political and social concerns. The UN international conferences on women between 1975 and 1995, among others, provided significant venues for women to exchange experiences, ideas and visions around gender issues and to examine the various crises in their countries and regions such as the food crisis, poverty, hunger, debt, militarism, neoliberal policies, political repression and human-rights abuses. For example, the 1970s and 1980s marked a period of vibrant feminist activism in many Latin American countries that was linked to the development of feminist knowledge (Portugal 2004). A feminist group in Peru called the *Accion para la Liberacion de la Mujer Peruana* (Action for the Liberation of Peruvian Women) was formed along with the research institute called *Centro de la Mujer Peruana Flora Tristan* (Flora Tristan Center for the Peruvian Women). Feminist groups and networks were formed in other countries including Chile, Brazil and the Philippines, which led to the formation of the International Feminist Network (IFN), the Latin American and Caribbean Women's Health Network (LACWHN), the Center for Women's Resources (CWR) and the Women and Gender Institute (WAGI), among

others. In a sense, much feminist research is rooted in the political activism of the women's movement.

At the same time, feminist knowledge, alongside the frameworks which embodied it, has served as the basis and guide to praxis related to women's empowerment and collective action. It allows for better clarity of the vision of social change and can serve as a guide for consciousness-raising, thus enabling feminist research to be transformative at the grassroots level. Collective action in particular has a key role in promoting the empowerment of women, in the effective expression of women's voice and in creating the conditions for social change. Several feminist scholars have therefore emphasized the importance of building women's consciousness through both individual and collective action (Kabeer 2000; Sweetman 2013). They view the crucial role of collective action, especially in the form of women's organizations and social movements, in bringing about paradigmatic as well as key policy shifts necessary for promoting gender equality.

Many women's organizations throughout the world have embarked on actions promoted by feminist approaches to development. Some of their advocacies have promoted legal and political reforms to ensure that key institutions uphold women's claims to resources such as the law. Others have aimed for structural transformation and the reformulation of macroeconomic and social policies guiding the development process. While the construction of feminist knowledge about development is an important contribution to engendering development, it remains limited in affecting and addressing the systemic reproduction of inequalities, including gender inequality, unless it leads to structural change. The latter can only be brought about with parallel mobilization and collective action of women at all levels of society.

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23. Reading Freeman when ladders for development are gone

Rodrigo Arocena and Judith Sutz

It is on a global scale that the most extreme effects of worldwide inequality in incomes are apparent. The bias in the world research innovation system is so great as to constitute a danger to the future of human society. (Freeman 1982a, 184)

INTRODUCTION

Once upon a time the development process could be thought of as climbing a ladder. Competing paradigms had one main assertion in common: climbing the ladder meant, above all, industrialization. The orthodox paradigm of development – elaborated in the First World and shaped by a positive balance of its historical record – could be summarized by means of three assertions: (1) the ladder had already been climbed by industrial capitalist countries, the so-called developed countries, which therefore exemplified the desired outcome of the development process; (2) the other countries should try to follow the same path that was previously followed by the developed countries; (3) climbing the ladder was best fostered by full insertion into a global order ruled by markets and comparative advantages. In one way or another, that paradigm is still with us. It is still the dominant one, not really due to its successes but due to the economic, political, ideological and military power of the First World, fostered by the intertwining since the 1980s of capitalist restructuration and the emergence of a knowledge-based and innovation-driven economy (de la Mothe and Paquet 1996).

The revolutionary paradigm – shaped by the left-wing critique of the history of capitalism – asserted that: (1) the true aim of development is not compatible with capitalism; (2) the ladder of development was being climbed by industrializing socialist countries; (3) revolution was needed in order to start climbing the ladder by means of centrally planned industrialization. With the end of the Second World – the disappearance of the Soviet bloc and the turn to market in China – that paradigm seems to be gone.

Heterodox conceptions of development were so widely different that it is hardly possible to speak of a third paradigm, clearly distinguished from the other two paradigms mentioned above. Nevertheless, in order to be brief, we speak of a heterodox paradigm represented by the heterogeneous family of development conceptions that shared three traits: (1) they explicitly challenged the orthodox recipe for development by climbing the ladder in the track of industrial capitalist countries; (2) they explicitly or implicitly accepted that there existed a significant part of the world (for example, the First World or the Second World) that showed the way for development; (3) in any case industrialization is the royal way to development.

The plight and experiences of the Third World inspired some examples of the heterodox paradigm, like the Latin American structuralist conception pioneered by the

United Nations Economic Commission for Latin America and the Caribbean (ECLAC) and particularly by Prebisch (1950). From our point of view, its main assertion was that the world system created by industrialization in the North induced some specific traits of the peripheral conditions that prevented developing countries from climbing the ladder as industrial countries had previously climbed it; consequently, backwardness was also underdevelopment, and different ways for industrialization were needed. In the radical variants of this conception, different outcomes of the industrialization process were also searched for, because the main traits of the capitalist First World were not seen as akin to development ends. Thus dependency theory – in Latin America an offshoot of the ECLAC conception – came close to the revolutionary paradigm. The whole structuralist conception lost almost all its strength with the crisis of the 1980s that put an end to state-led development in Latin America (Bértola and Ocampo, 2012).

By then another type of state-led development in East Asia had fuelled another type of heterodox paradigm that we shall call the heterodox catching-up paradigm. It can be schematically characterized as a proposal for catching up with the First World by climbing a ladder that is very different from the one proposed by the orthodox paradigm, but at the same time quite similar to the one really climbed by industrialized countries; the steps of the real ladder include increasingly complex productive activities; climbing them requires (very) active policies that foster competitive advantages, because countries on the top steps systematically ‘kick away the ladder’ (Chang 2002) in order to prevent other countries from catching up with them.

Nevertheless, nowadays new paradigms for development are needed, first of all because the existing ones are neither desirable nor feasible in environmental terms. Catching up with the First World as exemplified by the United States, by means of climbing the ladder in the way China is doing it, is simply not an option for the peripheral world as a whole. If the whole world went that way, an environmental catastrophe would be very difficult to avoid. Sooner or later (hopefully not too late) a shift in dominating values and options will stem from the imperatives of survival.

As is well known, the work of Christopher Freeman (at the empirical level and its theoretical interpretation as well as at the policy-making level) is a fundamental reference for the heterodox catching-up paradigm. Our reading of his life and writings suggest nevertheless that his values and motivations were closer to the search for alternatives to capitalist-led routes to development than to catching up with the advanced capitalist world. In the late 1960s, while reflecting on international comparisons on research and development (R&D), he concluded by making ‘some personal value judgments explicit’, among which was the following: ‘My personal preference is for a more research-oriented society, both in Britain and in Europe, but for very different policy goals than those pursued in the USA and the USSR’ (Freeman 1967, 467).

He was a profoundly realistic explorer of new avenues for the economy of hope. We suspect that he would have agreed with Krugman (2009, 14) when he asserts:

For the first time since 1917, then, we live in a world in which property rights and free markets are viewed as fundamental principles, not grudging expedients; where the unpleasant aspects of a market system – inequality, unemployment, injustice – are accepted as facts of life. As in the Victorian era, capitalism is secure not only because of its successes . . . but because nobody has a plausible alternative.

The situation will not last forever. Surely there will be other ideologies, other dreams; and they will emerge sooner than later if the current economic crisis persists and deepens. But for now capitalism rules the world unchallenged.

We suggest that the search for alternative conceptions of development should combine four types of approaches: (1) first of all, a normative approach that characterizes development by its ethical ends and relates them with collective and individual commitments to development tasks; (2) a theoretical-factual approach which clarifies the main structural traits of the knowledge-based and innovation-driven economy as well as those of related power relations, understood as the broad context that shapes development issues; (3) a prospective approach which explores trends and characterizes the perspectives of advancing towards the normative horizon in the midst of the restrictions, challenges and potentialities marked by the factual approach; (4) a propositional approach that translates the normative approach into concrete policies that take into account facts and trends.

This chapter highlights some of several contributions stemming from Freeman's work to the elaboration to those four approaches and to the combination of the four approaches in an overall conception of development that is akin to 'development as freedom' (Sen 1999).

THE NORMATIVE APPROACH

Different ladders for development are characterized by its top echelon that defines the ends of development. A different type of paradigm is sketched by Sen's conception. This paradigm does not start, as all the paradigms of yesterday, by defining development as a place in the historical evolution but by its (normative) ends: 'Human development is the expansion of people's freedoms and capabilities to lead lives that they value and have reason to value' (UNDP 2011, 1). If this is development, catching up with the highly unequal neoliberal capitalism prevailing in the West is not the path to development, nor is climbing the ladder in some way akin to the process shaped by China's highly unequal autocratic party-state capitalism. Climbing related ladders does not look feasible for many peripheral countries, but above all it is not desirable.

Perhaps alternatives may be looked for by combining the four types of approaches previously described. For that, two requisites should be taken into account. The normative approach should include Sen's characterization of development. The propositional approach should translate into concrete policies Sen's assertion that the expansion of people's freedoms and capabilities defines not only the ends of development but also its fundamental tool. As said, we want to show that for such a research programme Freeman's work is a fundamental reference, connected with the contributions of two great teachers of development thought, Amartya Sen and Albert Hirschman. We conjecture that Freeman would have liked to be seen as working together with Hirschman and Sen.

One of the main contributions of Freeman's lifelong work in this regard refers to the roles and impacts of science, technology, innovation and related policies on development. Freeman's normative view on these matters has been expressed in one way or another in

all his writings. 'No economist, whether he is left-handed, right-handed or ambidextrous, can possibly determine the ends of society in pursuing R&D. The really big choices in science policy . . . are political questions or politico-morale questions' (Freeman 1992a, 31). Moreover: 'In the long run, what weight one gives to developing one's own problem-solving capacity goes back to these questions . . . and will depend partly on what kind of society we want to live in' (ibid., 47).

In a society where inequality is in part driven by knowledge (Tilly 2005) and by innovation, Freeman's normative approach is clear: there is nothing like one-size-fits-all in science, technology and innovation; alternatives can be built if serious determination is put to the task; social inclusion can be integrated into research agendas; and achieving inclusive innovations may become a new goal for innovation efforts.

ON THE THEORETICAL-FACTUAL APPROACH

The study of Christopher Freeman's work gives uncountable clues to address development issues. Some clues are bold and unmistakably related to development: Freeman explicitly addresses development problems there. Some, however, are only subtly related to development but nevertheless, when read with development in mind, they result in being surprisingly illuminating. There are so many clues, references, statements and reflections around development among Freeman's vast work that we need to suggest a taxonomy to take into account the most telling among them. We have selected five types of reflections that help in building a theoretical-factual approach to development issues linked to a normative approach, intertwined with a future-oriented approach and useful for a propositional approach to development.

The Role of Power

The starting point is stated as follows: 'economics is meaningless outside the framework of history, since economies are historical by nature. Economics is a science of transition' (Freeman and Louçã 2001, 3). It is understood that societies and economies evolve in such a way that 'their evolution has recognizable patterns' (ibid., 5). Thus, Freeman espoused a 'reasoned history approach', stemming in particular from Schumpeter and directly related to Marx, that 'looks for integrated theories that will be incomplete and not definitive, explanatory and not predictive, historical rather than simply economist, and evolutionary rather than mechanistic' (ibid., 117). In this view the 'social conflicts of all types are generated and articulated by . . . power in all its forms' (ibid., 121).

It is our conjecture that a dialogue between Freeman's theoretical approach and Mann's understanding of the patterned history of social power (Mann 1986, Ch. 16; 1993, 4) can be really worthwhile. Specifically, Freeman's profound understanding of technological change, in the past as well as in the present, offers an updated connection of Marx's conception of the role of the forces of production with Mann's conception of the role of organizational power.

In any case, it is beyond doubt that for a descriptive and explicative approach to development, the work of Freeman is a fundamental reference concerning the general impact of 'the rise of science-related technology' and its specific impact on the 'micro-economics

of innovation', to quote the titles of two sections of one of his books with Luc Soete. Concerning the first issue it is asserted that:

Since the relationship is one of interaction, the expression 'science-related' technology is usually preferable to the expression 'science-based' technology with its implication of an oversimplified one-way movement of ideas. Marx spoke of the machine as the 'point of entry' of science into the industrial system, but today this expression might be used with more justification about the R&D department. (Freeman and Soete 1997, 15)

The authors study in depth the consequences of this development for the strategies of firms and conclude: 'the requirements of successful innovation and the emergence of an R&D establishment within industry have profoundly modified patterns of firm behaviour. . . . World technology is just as much a part of the firm's environment as the world market' (ibid., 284). This can be seen as a general fact, with quite different consequences in central countries than in the peripheries. It could be argued that, from this point of view, central countries are those where an R&D establishment emerges within their own industrial sector, while a 'measure of the peripheral condition' is given by the combination of underuse of innovative capabilities and dependence for innovation on external R&D establishments. Today, world technology and the world market carry an influence on firms' behaviour through international networks, where asymmetries of power are evident:

Power in these networks will depend on a variety of information services and knowledge-based activities but not only on these. These networks are embedded in social systems where increasing inequality is now the rule and to some degree exacerbated by these developments. Both environmental and social problems are likely to become more acute in these circumstances . . . Breadth, enlightenment and social solidarity are essential in the end for any innovation system. (Freeman 2002, 210)

Normative and theoretical-factual approaches are indeed intertwined when it comes to power.

Power is an issue to be included centrally in the approach to innovation and development. Even if not explicitly mentioned, power is at the centre of the open question that Freeman put forward regarding our common future:

Information and communication technology (ICT) can help a great deal in saving energy, materials, and transport costs. Whether it does so, however, is a matter of social and economic policies, as well as of technology and science policy. Consequently, whether the world economy can move to a new and sustainable pattern of growth remains an open question. It is both a question of new priorities for public and private R&D to nurture a new range of possibilities in such areas as renewable and 'cleaner' energy sources and energy and materials conservation devices and a question of new regulatory mechanisms to ensure their worldwide diffusion. The latter may be the more difficult problem, as the difficulties with the carbon tax have shown. (Freeman 1996a, 33)

The research agenda needs to be seen, along with the policy agenda, as directly related to power.

The Role of Technology and How Such a Role Needs To Be Played

There are no alternatives to poverty and backwardness if the only productive strategies in a country are 'dependent' and 'traditional'. Freeman defined as 'dependent' a strategy that 'involves the acceptance of an essentially satellite or subordinate role' (Freeman 1982a, 180). A 'traditional' strategy is characterized by low incentives to innovate or to change, so business as usual can run for a long time while the scientific inputs are minimal or non-existent. But neither of these strategies is good enough for development. 'An underdeveloped country may for a while base itself mainly on an industrial structure which relies on dependent or traditional strategies. If it does so, it is likely to remain extremely poor and backward' (ibid., 184).

Freeman had original and often heterodox views on the importance of science and technology for development. A first point to be noted is that he did not take for granted that successive scientific and technological revolutions would raise human perspectives '*urbi et orbi*'. First of all because he was not a technology optimist: '(innovation) enables the whole quality of life to be changed for better or for worse' (ibid., 3). But more importantly, because he clearly differentiated the impacts of these revolutions, particularly on people's welfare, between developed and underdeveloped countries: 'The basis for a sustained (although cyclical) movement away from these lower limits of human misery and degradation was provided, outside the Third World countries, by successive technological revolutions' (Freeman 1984, 502). This last remark is fairly important: it is not the existence of knowledge or of new technical solutions per se that opens opportunities to free people from the lower limits of human misery and degradation that characterize the lives of vast numbers of people in underdeveloped countries. Consistently, technology transfer alone, its importance notwithstanding, is far from enough to allow the exploitation of knowledge to the advantage of developing countries. Freeman makes a remark that, even if from another context, is pretty adequate here: 'Diffusion of technical know-how does not simply depend on ability to pay' (Freeman 1982a, 96). It seems clear that without the development of endogenous capacities to be able to make use of contemporary knowledge – as well as capacities to contribute to the production of knowledge – the only door open for developing countries would be the import of technologies. Here Freeman's opinions are quite conclusive: 'The indiscriminate import of technologies developed for entirely different markets . . . may have disastrous employment and other social effects in weak poor countries' (ibid., 184).

There is no need to go any further in order to establish the importance Freeman gave to science and technology for development as well as to some specific requirements needed to allow them to play a positive role. There are, however, some remarks Freeman made that go to the heart of controversies that are not settled, even today, and that are worth recalling. Given the huge disparities in science, technology and innovation capacities around the world, sophisticated demand for knowledge in developing countries tends to be addressed, at both the private and public levels, by means of knowledge imports. This seems at first sight only commonsensical; the arguments against a short-sighted view that does not put into the equation the learning effects of this type of decisions are still dismissed in the name of efficiency and of obtaining the latest technology available. Why foster the reliance on the national capacities of a developing country to solve some complex problems that could, eventually, be bought turnkey from abroad? Why should

scientists and engineers of a developing country address complex problems that will stress to a maximum their capacities, when much better trained and more experienced scientists and engineers of developed countries present much less risk in terms of attaining good results? Freeman gives two reasons that go straight to the centre of these questions. The first one is ‘the effect of licensing the product on the morale of our own R&D engineers and scientists’ (Freeman 1992a, 47). This is a very strong argument. When people capable of facing difficult intellectual challenges are forced to work on routine problems because such challenges are derived to foreign expertise, the demoralizing effect can be quite strong, diminishing the willingness to study at home or fostering skilled emigration. The second reason is that the systematic reliance on technology imports gives rise to ‘voluntary underdevelopment’ (ibid., 48). This is a bold statement, and particularly accurate. Underdevelopment is thus related to a structural weakness concerning opportunities to learn by mobilizing national capabilities towards complex problems; such weakness is not necessarily intrinsic (in most cases it is not), but political.

A Special Way of Being Systemic

Freeman is well known as one of the founding fathers of the concept of national systems of innovation. He frequently refers the concept to the work of Friedrich List on the national system of political economy. One of the features of List’s work that Freeman particularly appreciated was his ability to take into account very different aspects of a sustainable growth process: ‘mental capital’, interactions between tangible and intangible investments, the skill level of the labour force, manufacturing as a learning space, the coordinating role of the state, among others (Freeman 1995). Freeman was particularly clear in his rejection of the opposite way of looking into development, that is, from a particular and exclusive point of view. He did not fail to recognize how difficult this can be for those who strongly believe that they have the main answers in their hands, but perhaps because of that he insists strongly on the need to open up broad perspectives. One of the clearest theoretical standpoints in Freeman’s thought is the need of trespassing – in terms of Hirschman (1981) – economic theory to explain economic behaviour, let alone social change. For instance, when commenting on *The Third Wave* by Alvin Toffler in the ‘Book’ section of *Futures*, he stated: ‘The fragmented approach of the social sciences is now increasingly a barrier to the understanding of what is happening to human social systems. There is a desperate need for the approach taken by John Stuart Mill or Karl Marx – the linking together of sociology, economics, politics, philosophy, history, and futurology’ (Freeman 1980, 508).

We can safely say that this strong and long-standing plea for interdisciplinarity is one of Freeman’s distinctive intellectual marks. Carlota Pérez chose this feature as her first remark on Freeman’s legacy in a memorial session in the 2011 Triple Helix conference: ‘Perhaps the most important lesson Freeman taught us was that economics is incapable to understand growth without interdisciplinarity’ (Pérez 2011). Thus, ‘being systemic’ – that is, using systems of innovation as a theoretical focusing device – is not just acknowledging the importance of several actors as well as the importance of the relationships they build and rebuild among them; it implies trying to understand both actors and relationships in their multiple facets, something impossible from any narrow disciplinary perspective.

In a 1982 unpublished paper that would have been forgotten but for the work of Bengt-Åke Lundvall, who insisted that it was the first text where the concept of 'national system of innovation' was put into black and white, Freeman proposed five characteristics to be taken into account when discussing innovation: coupling, creating, clustering, comprehending and coping (Freeman 1982b, 9). All of them are highly original and policy-inspiring, but 'creating' in particular refers to the blending of different sources of knowledge:

creativity is an essential element of entrepreneurship, since it involves the bringing together of what were previously disparate and scattered pieces of knowledge to create something new. Sometimes the term 'creativity' is reserved for those abilities of the scientist, which lead to new discoveries or of the artist, which lead to new works of art . . . In . . . entrepreneurial/engineering types of creativity the synthesis and creative application of information from a variety of different sources (including the arts and sciences) is critical. (ibid., 10)

Not in vain did Freeman choose as a foreword for *The Economics of Industrial Innovation* the passage where Adam Smith refers to philosophers or men of speculation 'whose trade is not to do anything but to observe everything and who, upon that account, are often able of combining together the powers of the most distant and dissimilar objects' (Smith 1976 [1904], 8, quoted in Freeman 1982a, 1). For Freeman, having a systemic approach implied being pluralistic in cognitive terms, a lesson as important as it is difficult to follow.

The Importance of Learning

Freeman put the issue of learning at the centre of his reflections around innovation and around convergence and divergence among countries. He highlighted first of all the difference between information and knowledge: 'It is not just a question of getting a lot of "information"; often there is an overload of information. The problem of innovation is to process and convert *information* from diverse sources into useful *knowledge* about designing, making and selling new products and processes' (Freeman 1991, 501).

We suggest that this conversion is made through two different processes of learning: one is the formal learning process, and another is the process of learning by working and interacting while attempting to solve problems. Underdevelopment is characterized by deficits in these two types of learning processes. The first deficit is well known and well measured: the proportion of young people finishing high school and going into university in East Asia and in Latin America bears a relation of three to one. The second deficit is related to the productive structure, to the knowledge demand and to the productive and innovation policies. Freeman loved to quote the following passage from List:

The present state of the nations is the result of the accumulation of all discoveries, inventions, improvements, perfections and exertions of all generations which have lived before us: they form the intellectual capital of the present human race, and every separate nation is productive only in the proportion in which it has known how to appropriate those attainments of former generations and to increase them by its own acquirements. (Friedrich List 1904 [1841], 113 in Freeman 1995, 6)

But how can a country produce such increase by its own acquirements for building answers to its own needs and circumstances? Only by addressing complex problems where learning is both a means and an outcome. As Freeman himself put it:

A second essential feature of catching up in new technology (the first is the education of large numbers of qualified engineers) is the promotion of a wide range of technical and scientific activities *within* industry and commerce itself. While a substantial flow of graduate engineers and other well educated people is a sine qua non of an active 'catching up policy', their efficient deployment in productive activities is, of course, also essential. (Freeman 1996b, 172)

It is worth underlining the uncommon expression 'catching up in new technology'. This cannot possibly mean that every country needs to become a competitive producer of the building blocks of the new technology – electronic micro-components or memory, for instance – but instead that every country should build its own capacity to use those building blocks to 'increase by its own acquirements' the necessary knowledge to solve problems. In this sense, it is obvious that catching up in new technologies cannot be done without opportunities for engineers and other well-educated people to exert their creativity. Freeman's support to this view is unmistakable: 'technological learning in the enterprises is the most essential factor in catching up' (*ibid.*, 174).

We arrive in this way at a main structural barrier to learning and catching up in new technologies for development: in the vast majority of developing countries enterprises are not strong technological learning spaces. This is so, as Reinert put it, because these countries specialize in activities that are devoid of learning potential, one of the main reasons why they are stuck in poverty (Reinert 2007, xxviii).

The theoretical approach highlights the importance of learning, while the facts show the difficulties that learning processes face in many developing countries. This sets the challenge for propositional approaches aiming to overcome these difficulties and start a virtuous circle of learning by profiting from the intellectual capital that humankind has produced so far, and by increasing it.

The Qualitative Regard

Freeman had an eye for indicators (1967, 1969). He worked on science and technology (S&T) indicators from the early 1960s, contributing substantially to the Organisation for Economic Co-operation and Development (OECD) Frascati Manual (OECD 1963). But he always advocated what we can call a 'modest' approach to measurements, particularly to output measures. Clearly, the systemic flavour was always with him, which is something to be underlined: 'being systemic' probably has its cradle in acknowledging that context matters not only in interpreting what has been measured but also concerning what and how to measure: 'in relating R&D comparisons to technological and economic progress it is necessary to take into account the innovation and imitative process as a whole and to measure as many aspects as possible' (Freeman 1967, 464). And later on he insists: 'The social and economic framework in which the R&D system is operating must always be considered' (*ibid.*, 466).

The importance of this approach to measurement for developing countries need not be stressed. In a review of what can be learned from the past in science, technology and innovation indicators, Freeman and Soete recalled that: 'innovation capability became

now seen less in terms of the ability to discover new technological principles, but more in terms of the ability to exploit systematically the effects produced by new combinations and use of pieces in the existing stock of knowledge' (Freeman and Soete 2007, 11). This is of paramount importance for developing countries, where the main policy issue is precisely to make the most of existing knowledge in terms of devising new heuristics for solving problems. But of course, how can these rather hidden practices be measured? First of all they must be recognized, something that can be done systematically only if there are approaches that give 'theoretical citizenry' to such practices, instead of simply dismissing them because they are different from those selected for bench-marking. We can only guess, but probably Freeman would have agreed with Feyerabend: 'Not only is the description of every single fact dependent on some theory, but there also exist facts which cannot be unearthed except with alternatives to the theory to be tested, and which become unavailable as soon as such alternatives are excluded' (Feyerabend 1988, 27).

Hand in hand with the claim to take into account issues that are considered important, even if they are difficult to measure – like human imagination and human will (Freeman 1967, 467) – comes the warning on the misuse or abuse of quantitative approaches. Freeman is particularly eloquent in this regard, and even if his warnings can rightly be seen as equally valid in any geography, they are particularly useful in underdevelopment.

Two book reviews by Freeman give a good picture of his way of thinking on this matter. The first refers to *Made in America: Regaining the Productive Edge*, and praises precisely the capacity of the authors to convey a thorough qualitative analysis of a quite complex issue:

Possessing the self-assurance of those who are already at the top of the tree in quantitative techniques and computer science and who already have a vast experience both of the advantages and the limitations of these techniques in the social sciences, they reject spurious mathematical formalisation. The eight study teams produced:

'a large mass of detailed, diverse and sometimes contradictory evidence. Drawing general conclusions from such evidence is necessarily an exercise in judgement. There is no algorithm that could take as input our mosaic of testimony, observation, cross-national comparisons, statistical analyses and case histories and produce as output a number characterising the overall performance of the national economy. We did not attempt to take such a mathematical approach. Instead we worked much like a jury.' (Freeman 1990, 401, quoting Dertouzos et al. 1989, 8)

The second review led to a paper, 'Malthus with a Computer', a reflection on the *Limits of Growth* of 1972 (Meadows et al. 1972). There, Freeman asserts:

It is essential to look at the political bias and the values implicitly or explicitly present in any study of social systems. The apparent detached neutrality of a computer model is as illusory as it is persuasive . . . The model is the message . . . The computer fetishist endows the computer model with a validity and an independent power which altogether transcends the mental models which are its essential basis. Because of the prevalence of this computer fetishism it cannot be repeated too often that the validity of any computer calculation depends entirely on the quality of the data and the assumptions (mental models) which are fed into it. Computer models cannot replace theory. (Freeman 1973, 7, 8)

Finally, while dealing with international comparisons of technological efforts and competitiveness, issues that have been thoroughly studied and where a wealth of data have been accumulated, Freeman asserted: 'the problems which we wish to investigate can

only to a small degree be illuminated by statistical evidence, since they involve also social, institutional and organisational questions . . . Consequently the method will be that of 'reasoned history' only occasionally supported by fragments of quantitative evidence' (Freeman 1982b, 8).

ELEMENTS FOR A PROSPECTIVE APPROACH

As already indicated, Freeman was permanently interested in the studies of the future. He was gifted to suggest trends that would be seriously discussed in years to come. For instance, in his enjoyable 'If I Rule the World', in 2001, he proposes the decriminalization of drugs as a path towards 'diverting the present illegal and criminal drug traffic into legal commercial channels to be regulated and taxed like alcohol and tobacco' (Freeman 2001, 477). Today several countries are discussing this issue at the parliamentary and society levels as a way out of a tragic problem; regarding cannabis, Uruguay has already decided in the sense Freeman recommended.

In order to be brief, and concerning the relation of the future-oriented part of his work to development issues, we shall only stress that he was always worried about (in)equality. In his book with Soete, attention is drawn to a problem 'which is likely to become ultimately a source of great political and social tension: the growth of inequality within and between countries' (Freeman and Soete 1997, 409). The approach and its examples suggest that the problem of inequality is related not only to social power relations but also to the dynamics of innovation: 'The advent of the information society has thus been accompanied by a reversal of all those trends towards social justice and improved welfare services, which were such a characteristic feature of the quarter century following the Second World War' (*ibid.*, 410).

A similar remark can be made regarding environmental issues. How can the catastrophes predicted in the 1970s be avoided? Freeman recalls that 'when the SPRU [Science Policy Research Unit] modelers changed the assumptions about technical change in the MIT [Massachusetts Institute of Technology] model this had the effect of *postponing* the predicted collapse but not necessarily of preventing it altogether. Only a continuing high rate of technical change *and* a set of institutional changes . . . would prevent catastrophe indefinitely' (Freeman 1996a, 34). Both issues are deeply intertwined, because to achieve the intensity and direction of technical change needed to cause social suffering to recede and to avoid environmental catastrophes, institutional changes inspired by normative aims are imperative. From such a standpoint, the prospective approach explores actors, actions, relationships and facts to arrive at stylized paths that summarize plausible evolutions.

Is there a plausible evolution in which innovation is driven by normative aims, backed by a supportive institutional framework and sustained in the long term by efficient policies stemming from solid social understandings? In his dialogue with Heilbroner, Freeman stated:

In particular I accept his view that the issue of relationships between rich and poor nations, and the problem of income redistribution within nations are likely to be at the centre of the world political stage over the next century. But I am not so pessimistic as he is about the utter

hopelessness of a quest for paths by which inequalities between nations and within nations might be reduced. Nor do I share his view that human ideas, ideals and foresight have so little influence on the course of events. Indeed, it is a consciousness of the extent to which ideas *do* influence the course of events which led us to involvement in this debate. (Freeman 1974, 451, emphasis in the original)

We cannot agree more with Christopher Freeman that indeed human ideas, ideals and foresight have influence on the course of events, and it is precisely because of this that the quest for development is not a chimera.

FROM THE THEORETICAL TO THE PROPOSITIONAL APPROACH

The factual description leads to policy prescriptions ‘on the need for complementary indigenous capacities’, that give concrete substance in the technological realm to Sen’s conception of development as the expansion of freedoms and capabilities: ‘in many countries the capacity to receive technology from outside imperatively requires some independent indigenous science base. To solve the innumerable local problems of soil, materials, environment, skills and climate requires that the indigenous base should grow and flourish’ (Freeman and Soete 1997, 363). A key issue for effective technology transfer is the capacity on the recipient side to master and adapt the transferred technology:

When growth is based at a considerable extent on the assimilation of best-practice techniques first developed elsewhere in the world (and that must be true of most technical change almost everywhere), then local R&D may still be very important . . . since it enables the adaptation and improvement of imported technology to be carried out with maximum efficiency. (Freeman 1992b, 12)

That prescription has a more general scope than its usual interpretation: ‘What is desirable on economic and technological grounds is even more so on cultural and political grounds’ (Freeman and Soete 1997, 364). The often neglected role of advanced knowledge for development as a self-centred process of change is clearly stated:

The greatest significance of fundamental research is that it provides a multipurpose general knowledge base on which to build a wide range of scientific and technical services. Every country without exception requires such a base, even if only on a very small scale. Without it there cannot be any independent long-term cultural, economic or political development. (ibid., 364)

Freeman offers other reasons in support of devoting resources to scientific and technological research in developing countries, even among severe resources constraints. Chief among them is one not so often mentioned: ‘very little of the world’s R&D is in fact directly concerned with the elementary needs of the majority of the world’s inhabitants’ (Freeman 1982a, 184). This precisely will be our starting point for a propositional approach.

Freeman would surely appreciate how important the issue of innovation for social inclusion has become in recent times. The need for a shift in the working programme

for science, technology and innovation to take into account 'the elementary needs of the majority of the world's inhabitants' is supported by Freeman's whole intellectual work.

We would like here to highlight only two issues. The first is that the needs we are talking about are not only relatively absent from most national R&D agendas, but cannot be addressed in canonical ways. More R&D around those needs is required as well as a differently oriented R&D, both R and D. The heuristics for solving problems in contexts of scarcity – different types of scarcities, from monetary resources to infrastructure – cannot be the same as the one used when abundance is the main contextual characteristic. Concepts such as 'frugal innovation' point to innovations that solve problems in new and 'strange' or 'uncommon' ways, reusing in different ways objects discarded from their original use or combining differently a smaller amount of resources to design cheaper solutions. This may be achieved by 'tinkering around', but academic research agendas can and need to be built around the challenge set by these type of innovations. The research teams that have achieved vaccines whose production cost is hundreds of times cheaper than the 'normal' ones after years of painful academic research can bear witness in the cause of research and innovation for social inclusion. The policy proposal here is: (1) to shake the academic research system, at the international and national levels, and awaken it to new problems, new methods of addressing them, new rewards to its efforts, new ways of feeling what its role in the world is; and (2) to search for ways for an 'inclusive innovation system' to grow in the interstices of 'innovation as usual systems' that are guided by market considerations and individual market demand. This proposal is clearly at the service of challenging the prospective growth trend of knowledge-based inequality; it is rooted in the normative orientation of development that sees it as the fulfilment of the people's right to live a decent life and starts from the conviction that coupled with several other ingredients, science and technology are absolutely fundamental to achieve a better world for all.

The second propositional issue is related to one of the main obstacles to achieving the former proposal. When innovation is linked to social inclusion through the trickle-down effect of economic growth via social policies seen as safety-nets, innovation policies and R&D policies will hardly be able to escape from the role assigned by a long history (and economic theory). Here is where Freeman's interdisciplinary plea shows how powerfully right it is, for what is needed is to invent a new role for innovation policies. The propositional approach here points to a type of innovation policies that should be thought as a chapter of social policies: that means that those innovation policies should be oriented towards solving problems of social exclusion and being judged in their efficiency by the outcomes of such efforts. But for this proposition to become truly systemic, a symmetric proposition is needed. From where will concrete demands for such innovation policies come, demands reflecting social needs but endowed with the necessary resources to command solutions? We propose to partially 'reinvent' social policies, conceiving them as innovation policies as well. The match between 'innovation policies as social policies' and 'social policies as innovation policies' may build the two blades of successful knowledge scissors to tailor social inclusion.

Concrete inspiration for this approach can be found in an interesting but not so widely known work to which Freeman contributed, the Maastricht memorandum, 'An Integrated Approach to European Innovation and Technology Diffusion Policy', mainly related to environmental public policy. We take the liberty to quote a passage

from the memorandum, but changing ‘environment’ for ‘social inclusion’: the result is interesting:

The use of science and technology policies to achieve [*social inclusion*] goals constitutes a new focus for technology policy. Superficially, this requires a return to the emphasis in the 1950s and 1960s on [*public goals*] that were met through mission oriented projects. However, there is a fundamental difference between older mission-oriented projects, for example nuclear, defence, and aerospace programmes, and new projects to support a [*socially inclusive*] development. The older projects developed radically new technologies through government procurement projects that were largely isolated from the rest of the economy . . . In contrast, mission-oriented innovation for [*social inclusion*] projects will need to combine procurement with many other policies in order to have pervasive effects on the entire structure of production and consumption within an economy. (Soete and Arundel 1993, 50)

FINAL REMARKS IN FREEMAN’S WORDS

Freeman’s contribution to development thinking is manifold, as the evidence in this chapter shows. As important as his concrete approach to complex specific issues of science, technology and innovation for development, is his whole intellectual posture. We chose only two fragments of it:

The increasing scientific content of technology and the increased subdivision and specialization within science itself had led to major problems of communication between specialist and non-specialist. These have been accentuated by the divisions within the educational system between the different disciplines and between the arts and the sciences. For many people, these tendencies, together with some of the unpleasant features of modern industrialization, have increased the sense of alienation from modern technology to the point where they question the desirability of any further innovation. They felt that the whole system is like an uncontrollable and unpredictable juggernaut which is sweeping human society along its wake . . . As a result, the social mechanisms by which we monitor and control the direction and pace of technical change are one of the most critical problems of contemporary politics. (Freeman 1982a, 17)

The book of Gabriel Garcia Marquez, *Love in the Time of Cholera*, can be read at many different levels; however I take the message to be: ‘Never give away to cynicism or despair. Remain true to the ideals of youth’. (Freeman 1992c [1991], 229)

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24. Albert O. Hirschman

*Michele Alacevich**

Reformers . . . behave like the country or the chessplayer who exasperatingly fights on when
'objectively' he has already lost – and occasionally goes on to win!
(Albert Hirschman 1963a, 271)

As with many things in Albert Hirschman's life, his career as a development economist was not the outcome of any planning. Born Otto Albert Hirschmann, the son of a Berlin upper-middle-class family of assimilated Jews, he left Germany for good in 1933, when Hitler seized power and the 17-year-old Hirschmann, a Social Democrat activist, risked immediate arrest. He moved to Paris, where he frequented the circles of German and Italian anti-Fascist exiles; then, in 1936, to London for a one-year fellowship at the London School of Economics. In late 1936 he joined the international brigades that supported the Spanish Republic against the coup by Francisco Franco, fighting in the Asturias and Catalonia, but left when the communists radicalized their takeover of the Republican armies. He joined his older sister Ursula in Trieste, Italy, who had married the anti-Fascist philosopher Eugenio Colorni there (Colorni would be killed by the Fascists in Rome; after his death, Ursula would marry Altiero Spinelli, a friend of Colorni's and one of the authors of the Ventotene Manifesto). In Trieste, Hirschmann continued his studies in economics, published his first articles on demographic and monetary issues in Italy and France, and also continued his anti-Fascist militancy, until he was forced to leave Italy because of the increasingly difficult situation for Jews and anti-Fascist intellectuals. The war found him in Paris, where he once again collaborated with anti-Nazi and anti-Fascist movements: this time Hirschmann assisted the American journalist Varian Fry, who had established and managed an undercover organization that helped thousands of Jewish and leftist refugees flee Europe for the United States.¹ Ultimately, Hirschmann also fled to the United States. At the immigration window, Otto Albert Hirschmann changed his name to Albert O., while his last name lost the second 'n'.²

At Berkeley, where he studied and wrote his first book, *National Power and the*

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¹ On this episode, see Varian Fry (2013 [1945]), and the 2001 TV movie *Varian's War*, directed by Lionel Chetwynd, with William Hurt and Julia Ormond.

² Jeremy Adelman's biography of Hirschman (Adelman 2013) is fundamental reading. Interesting information can be also found in Hirschman (1998) and in the memoirs of his older sister, Ursula Hirschmann (1993).

Structure of Foreign Trade (1945), Hirschman married Sarah Chapiro, the daughter of a Lithuanian Jewish merchant family. He then enlisted in the US Army, worked for the Office of Strategic Services in Italy and Germany and became father to the first of two daughters, Katia (born in 1944; Lisa would follow in 1946). Hirschman got his first proper job in the United States, after the end of the war, as an economic analyst for the Federal Reserve Board, where he focused on Western Europe, reconstruction, and Marshall Plan policies. Development issues were not prominent in his work, nor could one predict that they would soon become so. As Hirschman remembered this professional turn 40 years later:

In 1952, the possibility of either going to Europe . . . in connection with the European Monetary Union, or of going to Colombia as an economic adviser arose. I opted to take the second road, because it was new. At that point my wife thought I had gone mad: she wanted to return to Paris, where, after all, she had lived most of her youth. But after a short time she was quite satisfied with my choice . . .

In Colombia it was not easy . . . There was a new planning council that had been established on the recommendation of the World Bank, which had sent a mission to the country. But the Colombians said, 'If you want us to set up a new planning council, send us an economist who is capable of advising us'. The Bank looked around, my name was mentioned, and I was ready to come – and in fact did come. (Hirschman 1998, 80–81)

To the eye of a twenty-first-century observer, Colombia in the early 1950s may seem a rather peripheral destination, not as important as other developing countries, such as India or Indonesia, which in the postwar years were committed to the goal of economic development and modernization. But in fact, in the early postwar years, Colombia appeared to be a country rich in natural resources and full of potential: its government was committed to modernizing the country, so much so that in 1949 it hosted the first 'general survey mission' ever sent by the World Bank to a developing country. The goal of that mission was ambitious: to formulate 'a development program designed to raise the standard of living of the Colombian people' (IBRD 1950, xv) and to establish the model for future World Bank missions to less-developed countries.³ Colombia, in sum, was seen as a 'laboratory' for the definition of development policies.

The 1949 mission to Colombia was headed by Lauchlin Currie, a prominent former New Dealer, top Federal Reserve (Fed) officer under Governor Marriner Eccles and later personal economic advisor to Franklin D. Roosevelt and Roosevelt's envoy to China. Under his leadership, the mission prepared a thorough study of the social and economic conditions of the country and published a voluminous report envisioning a major comprehensive investments plan (IBRD 1950).⁴ As Currie remarked at a conference in Washington while he was drafting the report:

Economic, political and social phenomena are so inter-related and interwoven that it is difficult to effect any significant and lasting improvement in one sector of the economy while leaving the

³ 'Outgoing wire', John McCloy to Lionel Robbins, 1 March 1949, quoted in Alacevich (2009). For a detailed analysis of the World Bank 1949 mission to Colombia, see Alacevich (2009). For an analysis of the whole group of early World Bank general survey missions, see Alacevich (2011a). For earlier assessments of those early missions, see Spengler (1954) and Moore (1960).

⁴ On Lauchlin Currie, see Sandilands (1990).

other sector unaffected . . . Poverty, ill health, ignorance, lack of ambition, low productivity are not only concomitants – they actually reinforce and perpetuate one another. (Currie 1950, 5)

Despite the widespread political and social violence that vexed Colombia before, during and after the mission as a consequence of the assassination of the opposition leader Manuel Gaitán in April 1949, the collaboration between the Colombian government and the World Bank remained strong. In 1950 a Committee for Economic Development – the *Comité de Desarrollo Económico* – was established to turn the mission's recommendations into actual policies. Lauchlin Currie, former head of the mission, was appointed economic consultant to the Committee, in fact acting as its technical secretary and marking the continuity between the study phase of the mission and the implementation phase of the *Comité*.

Albert Hirschman moved to Colombia in 1952 as World Bank appointee to the body that meanwhile had replaced the *Comité*, the *Consejo Nacional de Planificación* (National Planning Council). It did not take long for Hirschman and Currie to discover that they were taking opposite positions on basically all the deliberations of the *Consejo*. More specifically, Hirschman had little patience for the rhetoric of the comprehensive plan that characterized Currie's approach to development planning. Hirschman's first published criticism appeared in a 1954 article where he described integrated development planning as a 'myth', a futile exercise because the figures included in an investment budget could not be other than heterogeneous, tentative and imprecise. In fact, in Hirschman's words, 'the pretense of total, integrated economic planning could and often does coexist quite amicably with, and may serve to cover up, unregenerated total improvisation in the actual undertaking and carrying out of investment projects' (Hirschman 1971 [1954], 47)

Over time, Hirschman began to recognize that his many disparate observations and disagreements with the comprehensive, integrated approach of the *Consejo* headed by Currie actually resulted in a larger, coherent critique of what Hirschman described as a 'new orthodoxy' in development economics. In Hirschman's view, the comprehensive approach envisioned by Currie bore the same flaws as the theories that were quickly shaping development economics in those years. In a seminal 1943 article on the 'Problems of Industrialisation of Eastern and South-Eastern Europe', for example, Paul Rosenstein-Rodan had made the establishment of an industrial sector and the massive transfer of manpower from agriculture to industry the central point of his development strategy. The new industrial sector, Rosenstein-Rodan claimed, was to be considered 'like one huge firm or trust' (Rosenstein-Rodan 1943, 204). The underlying assumption was that only the concerted establishment of many industries, as though they were different departments of one single huge firm as opposed to isolated factories, would create the external economies and the demand necessary for the new industrial sector to thrive. As Rosenstein-Rodan put it, if unemployed agrarian workers

were taken from the land and put, not into one industry, but into a whole series of industries which produce the bulk of the goods on which the workers would spend their wages, what was not true in the case of one [isolated] shoe factory would become true in the case of a whole system of industries: it would create its own additional market (Rosenstein-Rodan 1943, 206)

Another prominent development economist, Ragnar Nurkse, thus concluded that 'a frontal attack of this sort – a wave of capital investments in a number of different

industries – can economically succeed while any substantial application of capital by an individual entrepreneur in any particular industry may be blocked or discouraged by the limitations of the pre-existing market’ (Nurkse 1962 [1953], 13). These theories were soon described as a ‘balanced-growth’ approach to development, because they envisioned a growth on many fronts, based on a fundamental complementarity between different sectors. A sector that would grow alone or too fast with respect to others, was, in this perspective, not only useless for the purpose of development but also doomed to fail.

Hirschman’s critique of these theories took full shape in his book *The Strategy of Economic Development*, published in 1958, two years after he and his family had returned to the United States from Colombia. In that book, Hirschman waged an attack against the balanced-growth approach:

My principal point is that the theory fails as a theory of *development*. Development presumably means the process of change of one type of economy into some other more advanced type. But such a process is given up as hopeless by the balanced growth theory which finds it difficult to visualize how the ‘underdevelopment equilibrium’ can be broken into at any point . . . The balanced growth theory reaches the conclusion that an entirely new, self-contained modern industrial economy must be superimposed on the stagnant and equally self-contained traditional sector. (Hirschman 1963b [1958], 51–52, emphasis in the original)

Since the key to development was the process of change starting from a condition of economic and social backwardness, the elements considered by balanced-growth proponents as obstacles – scarce capitals, imperfect markets, the inability to coordinate entrepreneurial decisions – became the basic elements of Hirschman’s analysis. The question, in other words, was not how to secure foreign aid, how to create new and efficient markets, or how to substitute centralized decision-making for imperfect entrepreneurial business decisions. On the contrary, Hirschman claimed, the question was how to foster investment decisions in a situation characterized by scarce capitals, imperfect markets and constrained entrepreneurial activity. Hence, Hirschman’s focus turned to the process of resource mobilization or, as he put it, on finding the ‘inducement mechanisms’ and the ‘hidden rationalities’ that made growth possible, and the ‘linkages’ that connected sectors or industries or firms; in a nutshell, the mechanisms that would facilitate additional investment in spite of the apparent shortcomings of an underdeveloped economic and institutional landscape. ‘Development depends not so much on finding optimal combinations for given resources and factors of production’, Hirschman wrote, ‘as on calling forth and listing for development purposes resources and abilities that are hidden, scattered, or badly utilized’ (Hirschman 1963b [1958], 5).

Hirschman’s radical critique of the balanced-growth approach was widely discussed and reviewed. *Strategy* quickly became a standard reference in development studies, earning his author fame and tenure at Columbia University. Perhaps most important, from a disciplinary perspective, is that the book addressed so directly the core of the early postwar development debate that it immediately became an essential and defining element of it. The balanced- versus unbalanced-growth dichotomy is a central theme of early development theories. As Paul Krugman once put it, the ‘glory days of high development theory’ span about 15 years, from the 1943 article by Rosenstein-Rodan to the publication of Hirschman’s *Strategy* in 1958 (Krugman 1994).

DEVELOPMENT ECONOMICS IN THEORY AND PRACTICE

Whereas the balanced- versus unbalanced-growth debate, which Hirschman so insightfully contributed to shape, was central to the theory of development economics, its influence on the practice of development policies is less obvious. This apparent contradiction can be explained with the help of an episode from the years in Colombia: how the Currie mission, the following national planning committees, and Albert Hirschman discussed the opportunity of building an integrated steel plant.

At the end of World War II, domestic steel production in Colombia was regarded as an overriding strategic national interest, and the project for an integrated steel plant near the city of Paz del Río, in an internal, mountainous region, was at an advanced stage of implementation. The 1949 World Bank mission advised against the plant, both in terms of merit as a capital-intensive production requiring extremely high output, and in terms of location: the plant was isolated from the main lines of communication of the country, thus making it arduous and expensive to transport the output to the final destinations. Furthermore, this isolation would prevent the establishment of nearby plants that in principle could have harnessed the by-products of steel production (IBRD 1950, 423–425).

A document prepared by the Comité de Desarrollo Económico added that ‘the maximum progress achievable [for the years 1951–1955] is only possible if the amount devoted to each sector, for example transportation, agriculture, or industry, is proportional to its contribution to the overall Colombian economy during this period’.⁵ The alternative uses of the funds needed for the integrated steel mill were also listed: the construction of a hydroelectric plant covering half of the production of electric power in Colombia in 1950; or thermoelectric plants; or 30 000 private houses; or the purchase of 266 diesel locomotives and the increase of roads and railways by about 500 km; or the construction of 23 000 rooms for hospitals, or new schools accommodating 900 000 students.⁶ Hirschman’s critique addressed precisely this kind of reasoning, namely the idea that the development of a sector was to be proportional to the development of other sectors and that an investment plan was a zero-sum exercise. As noted above, Hirschman underscored the dynamic character of industrialization and thus the ‘backward’ and ‘forward’ linkages that a specific investment would have encouraged upstream or downstream from that initial investment. A steel industry, according to Hirschman, was not only a ‘national symbol’, as the Currie mission thought, but a veritable engine of regional and national industrialization: ‘Perhaps the underdeveloped countries are not so foolish and so exclusively prestige-motivated in attributing prime importance to this industry!’ (Hirschman 1963b [1958], 108).

In this polemic, both sides overlooked many important points of contact between their apparently opposed perspectives. The report of the World Bank argued that technical and geographic limits would weaken the impact of the prospective steel plant on the development of other industrial sectors. The steel plant was unlikely to leverage a ‘growing point’, which was considered the most desirable result for both the Currie

⁵ Comité de Desarrollo Económico, ‘Informe de la misión para el Comité. Fomento de una industria colombiana de acero’, draft, 15 December 1950, 15, Lauchlin B. Currie Papers, Duke University.

⁶ Ibid.

mission and Hirschman, who dedicated an entire chapter of *Strategy* to growing points (Hirschman 1963b [1958], Ch. 10). When it became clear that the Colombian government was determined to build the steel plant despite the mission's opposition, Lauchlin Currie recommended developing it in stages. This would have limited the costs of the unfortunate location and allowed the business to gain strength despite this initial handicap. There would have been gradual growth as staff and workers acquired competencies and the plant itself gained a bigger market share. This reasoning was not too different from Hirschman's attempt to find 'hidden rationalities' in the process of growth. Thanks to these hidden rationalities, initial obstacles may play a positive role in the process of growth, as they help forge decisions and find new solutions. The mission and later the Comité tried to mediate between industrial and political motives, placing themselves at the center of a decision-making and problem-solving process. This is what Hirschman highlighted as the indispensable element (but also the rarest) for development: the ability to make entrepreneurial decisions.

A few perceptive commentators had noticed that despite the strong polemical tone of that early diatribe and its spillovers in the theoretical debate, the two seemingly irreconcilable approaches had many points of contact. As Amartya Sen put it, Hirschman seemed to be 'overstating' his case:

Controversies on 'balanced' versus 'unbalanced' growth tend to leave the readers . . . a little puzzled. Put in their native forms, both the doctrines look right; examined from the other's point of view, each looks totally inadequate . . . The 'balanced' and the 'unbalanced' growth doctrines have a considerable amount of common ground. (Sen 1960, 591–592)

For example, when Rosenstein-Rodan and Nurkse discussed how to mobilize 'disguised unemployment' in agriculture, they were in fact trying to bring up what Hirschman would have called 'hidden or badly utilized resources'.

It should be noted, however, that the years of 'high development theory', as Krugman labeled it, were pioneering years for development economics. The focus of this new and thriving discipline – how backward societies are to develop – was quickly becoming one of the top priorities of the international agenda. With the onset of the Cold War, international development and foreign aid became fundamental strategic questions. Within a nascent discipline quickly gaining global relevance, the debate soon became overheated. Opposing theories are natural elements of any field of human inquiry, and admittedly the 'balanced' and 'unbalanced' approaches highlighted different aspects of the development process. But in addition to intellectual disagreements, another key conflict was about what should be the overarching goal of the discipline and which approach would best incarnate this goal. As sociologist Robert K. Merton once noticed:

These controversies follow the classically identified course of social conflict . . . Since the conflict is public, it becomes a status battle more nearly than a search for truth . . . The consequent polarization leads each group . . . to respond largely to stereotyped versions of what is being done by the other . . . Not that these stereotypes have no basis in reality at all, but in the course of social conflict, they become self-confirming stereotypes. (Merton 1973 [1961], 55–56)⁷

⁷ For a thorough discussion of the early debates in development economics see Alacevich (2011b).

NEW QUESTIONS AND THE SEARCH FOR A NOVEL PERSPECTIVE

As it happens, once the pioneering phase of a disciplinary field is over, the theoretical heat also diminishes. After the publication of *Strategy*, Hirschman himself quickly became less interested in high theoretical debates, shifting his focus instead to in-depth analysis of specific, highly contextualized processes of change. Hirschman's second and third books of what he would later describe as his 'development trilogy' (Hirschman 1995 [1994], vii) rested strongly on deep historical and context-specific analysis. How can this shift be explained?

After almost 20 years of expansion, the development field – and development economics with it – was undergoing a major transformation. In the pioneering days of the early postwar period, development policies were based on nothing more than trial and error, theories were only then starting to take shape, and observations and data were scant. As Lauchlin Currie, Hirschman's arch-enemy during the Colombian days, later pointed out:

there were no precedents for a mission of this sort [the 1949 mission to Colombia] and indeed nothing called development economics. I just assumed that it was a case of applying various branches of economics to the problems of a specific country, and accordingly I recruited a group of specialists in public finance, foreign exchange, transport, agriculture and so on. (Currie 1967, 30–31)

By the early 1960s, however, the broad generalizations and big concepts that had shaped development economics during its initial years were considered increasingly inadequate to explain the causes of, and remedies for, the economic and social underdevelopment of the so-called Third World countries, which were quickly growing in number due to the demise of the colonial empires. It was increasingly apparent that these countries presented different, specific traits and challenges. But the sense of inadequacy of development theories was also due to the confusing record, to say the least, of development policies implemented until then. The outcomes of foreign development assistance were not easily interpretable, and in many cases they offered evidence of failure: 'high development economics' apparently had not delivered what it had promised. A 1964 report by the Brookings Institution on foreign aid summarized this feeling of disorientation:

Aid is being extended, bilaterally and multilaterally, to 100 countries, democratic and authoritarian, allied and neutral, progressing and retrogressing, without satisfactory standards for evaluating competing claims, promoting particular strategies, harmonizing aid with other available instruments of policy, or appraising the results achieved. There is need for a better political, moral and economic framework within which to review our foreign aid programs and to prepare recommendations regarding their future.⁸

Building on the methodological lesson of his former colleague, the economic historian Alexander Gerschenkron, Hirschman was among the first development scholars to rec-

⁸ The Brookings Institution, Division of Foreign Policy Studies, 'Proposal for a Program of Studies Dealing with American Foreign Assistance', April 1964 (Revised), 5, Projects and Studies – Projects Evaluation – Professor Albert O. Hirschman – Volume 1, Operations policy files – Projects and studies – General Files – General 1946–1968, World Bank Group Archives (henceforth: World Bank Hirschman Folder, WBGA).

ognize the need for a different approach. Gerschenkron had shown that the process of economic development of continental European countries (the so-called 'second-comers' and 'latecomers'), far from replicating the English model, had followed idiosyncratic paths of modernization depending on their institutional, political, financial and social resources, their relative backwardness and the timing and extent of their industrialization effort (Gerschenkron 1962, which collects articles dating back to the early 1950s). The lesson was also clear for the 'very latecomers' of the mid-twentieth century: no 'one size fits all' recipe or theory of development could provide all the answers to the problems of underdeveloped countries.

Hirschman was also critical of the increasing appeal that revolution seemed to have for Latin American intellectuals and policy-makers in search of a way to overcome social and economic underdevelopment and inequality. Hirschman thought that comprehensive plans on one side of the spectrum and revolutionary solutions on the other side were inadequate: by attempting to overcome underdevelopment in one big leap, they left out the complexities of the process of change from a backward or pre-revolutionary society to a modern or post-revolutionary one. Hirschman would later summarize his criticism to both approaches in his Foreword to the first book by Judith Tendler, a PhD student whom he was mentoring in the early 1960s (now Professor Emeritus of Political Economy at MIT):

Underdevelopment having been diagnosed as something so multifaceted, tangled, and deep-rooted, it was often concluded that the situation called for revolution, massive redistribution of wealth and power from the rich to the poor countries, or at least coordinated attack on pervasive backwardness through highly competent central planning.

But what if none of these *dei ex machina* are available to take matters properly in hand? What if the fortress of underdevelopment, just because it is so formidable, cannot be conquered by frontal assault? In that unfortunately quite common case, we need to know much more about ways in which the fortress can be surrounded, weakened by infiltration or subversion, and eventually taken by similar indirect tactics and processes. And I suggest that the major contribution to our knowledge of economic development must now come from detailed studies of such processes. (Hirschman 1968, vii–viii)

Judith Tendler's book was a fine example of this new approach.⁹ In it, Tendler discussed how hydro and thermal power had affected the Brazilian economic development of the 1950s and the 1960s in different ways. From this specific case, Tendler was able to build a solid and broader analysis of certain development dynamics of postwar Brazil. In Tendler's words:

should the work therefore be properly identified as a narrow case study, with no pretension of relevance to more general questions of economic development? The answer . . . is in the negative, for this study is meant to illustrate the general thesis that technologies vary as to their political vulnerability, their ability to draw out and train competent talent, and their capacity to brook the coexistence of politically antagonistic institutions. The lesson of this particular case is not that hydro should be favored in developing countries, but that the technological configuration of a project, program, or economic activity is a valuable source of information in the study of opportunities for economic development. (Tendler 1968, 6; see also Tendler 1965)

⁹ For other examples, see Weaver (1968) and Echeverría (1969).

THE POLITICAL ECONOMY OF DEVELOPMENT: *JOURNEYS TOWARD PROGRESS*

Of course this shift in perspective was also apparent in Hirschman's work. Historical narratives of specific economic problems in three Latin American countries make up two-thirds of his 1963 book, *Journeys toward Progress*. As he put it, 'the essence of this volume is in the flow of the three stories' about problems that had plagued Latin American countries for a long time, namely, drought in North-East Brazil, land reform in Colombia and inflation in Chile (Hirschman 1963a, 1). Hirschman's interest lay in how governments in Latin America would solve these problems and the related policy-making processes. 'The best method of looking for answers', he claimed, 'was to scrutinize the record of a few specific, documented, protracted, significant policy problems' (Hirschman 1963a, 2).

However idiosyncratic the record of specific problems, Hirschman was interested in finding elements that would improve the effectiveness of policy reform in the future. While he did not believe that any iron law governed social, economic and political dynamics, his research aimed at understanding the features underlying the policy-making processes that he had examined in his country studies. His focus on historical analysis, thus, was not a goal per se, but a way to achieve a broader understanding of political processes in Latin America. Hirschman's terminological choices are revealing of his awareness of the difficulties to generalize from specific cases: he predicted that his analysis would produce only 'tentative' and 'dispersed' findings, and stated that his goal was not to produce a theory of policy-making, but to sketch 'a Latin American "style" in handling, learning about, and moving toward the solution of large-scale policy problems' (Hirschman 1963a, 227).

Underdeveloped societies, Hirschman noted, are characterized by inadequate and ineffectual communication between citizens and the government. In such a situation, violence and mass protest are often the only way for long-neglected problems to get the attention of the government. Problems that are perceived as 'pressing' will often produce some reaction and attempt at solving them, but this is not necessarily based on a real understanding of the roots of the problem. 'Motivation', in other words, would have priority over 'understanding'. The effects of this dynamic are often visible in underdeveloped countries: certain grandiose attempts to attack big problems frontally, disregarding narrower but perhaps more manageable targets; the launch of comprehensive plans to solve all problems at once; the frequent establishment of new institutions dedicated to solve once and for all a certain problem; the excessive reliance on imported solutions that appear to be lifesavers only because they are 'foreign'; and finally, major policy shifts and ideological clashes.

Ideology, in particular, was a fundamental lens to understand the development debate in Latin America and the Latin American style of problem-solving and policy-making. Hirschman had specifically touched on the role of ideology in Latin America in the introductory chapter to his 1961 edited book *Latin American Issues* (Hirschman 1961). In this collection of essays on the problem of inflation in Latin America, Hirschman's attempt was to discuss the role of ideology in shaping the surrounding debate. As Jeremy Adelman put it, 'if economists were accustomed to thinking of themselves as outside societies looking in, like a doctor examining a patient, Hirschman turned them into the subject' (Adelman 2013, 369).

When Hirschman examined ideology and the other elements of policy-making in *Journeys*, he discovered that they presented several interesting and promising features. Those seemingly dysfunctional features of Latin American policy-making, far from being hopelessly negative, actually functioned as by-ways through which countries lacking a political system capable of ensuring a dialogue between the public and policy-makers became aware of certain problems and committed, perhaps unevenly, to their resolution. For example, comprehensive plans proved to be particularly useful to link neglected problems to a pressing problem already under the spotlight. Thus the 'comprehensive plan', the idea that no solution can come to any specific problem unless a whole set of issues is addressed in a coordinated way, became in Hirschman's perspective 'a generalized device for indirectly achieving recognition for the stepchild problems' (Hirschman 1963a, 232). As mentioned above, Hirschman's aversion to comprehensive development plans had prompted his harsh critique of the balanced-growth approach and his outline of an alternative, unbalanced approach in *The Strategy of Economic Growth*. But while in that case Hirschman was engaged in a theoretical debate on the mechanisms of industrial development in less-developed countries, in *Journeys* he was discussing a very different set of questions. The comprehensive plan, economically inefficient and useless, was – from the perspective of policy-making – an important strategic device. As pointless and rigid as a comprehensive plan might seem when the question was how to encourage economic entrepreneurship, it turned out to be rich and flexible when the question became how to bring about political reforms.

In the same vein, other characteristics of this 'Latin American style' may have positive if unexpected sides. Excessive reform promises, for example, are usually followed by meager results. Yet, a 'utopian phase of policy-making' often has the merit of generating legislation which, even though initially unenforced, nonetheless exists 'on the books'. In a subsequent round of reform efforts, this dormant legislation will probably be enforced, thus securing the legal basis for policy initiatives that would have otherwise been inapplicable. Likewise, the mix of outright criticism of previous policies and blind faith in new approaches that characterizes the policy swings studied by Hirschman in his case studies had a number of positive spin-offs. First of all, the habit of considering all government attempts at reform as eventually doomed made opposition to them weaker than it might have been. In other words, the rhetoric of failure opened up spaces for actual reform. At the same time, the bombastic announcements of new policies – while likely destined, like previous efforts, for less than successful epilogues – had an energizing effect on policy-makers: a selective amnesia on previous failures made new attempts possible. Hirschman's optimism seems excessive here, for the two effects of the rhetoric of failure and the rhetoric of success might as well produce outright reactionary results.

However, there was a method to this optimism. Hirschman's 1963 book, after all, is an attempt at explaining the mechanisms of economic and social reform short of revolutionary events. It should be noted that revolution, in early 1960s Latin America, was a rather fashionable concept, its most successful example being the recent Cuban revolution. Hirschman did not deny the existence of situations, in Latin America and elsewhere, in which opposition to reform and concentration of power were so rigid that the only hope to bring about some change was through a revolution. However, his main interest lay in those cases where reform was feasible. In such cases, calls for revolution were unnecessary, and revolutionary intellectuals were analytically weak: instead of explaining social

change, they contented themselves with invoking a 'cataclysmic interlude between two static societies': the pre-revolutionary one, rotten and unjust and unresponsive to reform; and the post-revolutionary one, just and harmonious and no longer in need of further improvement. Similar to what Hirschman had already observed in his criticism of the balanced-growth approach, which he thought superimposed a developed society on a backward reality, he found this time that calls for revolution impeded the analysis of the truly interesting question: that is, how change happens. There was a lot to be explored in the space between effortless reforms at one extreme and revolutions at the other. Hirschman's study was a way to unravel material for a 'reformmonger's manual'. As he put it, 'perhaps it is time that such a text be written and offer some competition to the many handbooks on the techniques of revolutions, coups d'état, and guerrilla warfare' (Hirschman 1963a, 256).

Indeed, Hirschman's goal was 'to show how elements of both reform and revolution are present in the sequences of policy-making which we have studied' (Hirschman 1963a, 256), and from this perspective, violence itself could become an ingredient of reform. Colombian peasants, for instance, had often seized uncultivated land illegally and violently. But those eruptions of violence, far from leading to revolution, made it possible for reformist governments to legislate about land redistribution in ways that would have been unthinkable without the peasants' violent land seizures. Hirschman was amused by the 'highly disorderly sequence' the Colombians had invented: instead of the predictable two-step sequence from revolution to land redistribution within the framework of the new revolutionary legal order, Colombian peasants had first enacted decentralized and illegal redistribution, which was later legalized thanks to a reformist government (Hirschman 1963a, 260). More generally, Hirschman highlighted the enormous complexity of reformist action in Latin American countries and the mixed character of reform policies, for they appeared to be made of both non-antagonistic and antagonistic dynamics.

The whole book and the research upon which it was based, which Hirschman had conducted during multiple trips to Latin America with his wife, Sarah, and his colleague and friend, political scientist Charles E. Lindblom, was an uncompromising attempt at introducing public-policy analysis in the realm of development economics. Dissatisfied with the relegation of public decision-making to the role of mere 'preconditions' to economic growth, in *Journeys* Hirschman was determined to show how processes of decision-making and problem-solving play a decisive role at all stages of development. He explicitly connected this goal to his previous book, *Strategy*, in which he had investigated a variety of mechanisms able to generate entrepreneurial resources to advance economic development.

Hirschman's attempt at connecting economic and political analysis, perhaps not unexpectedly, was appreciated mostly by political scientists, whereas fellow economists advanced more than one criticism. Mancur Olson, Jr considered *Journeys* probably the best book published until then on the two-way relationship between economic development and policy-making (Olson 1965). Several economists, however, noted that the economic analysis of the three case studies was insufficient and at times unconvincing. As Dudley Seers put it in an otherwise positive review, 'it is one thing to say that economic theory needs to take account of political factors, another to leave economics very largely out of the picture' (Seers 1964, 158).

THE POLITICAL ECONOMY OF PROJECT APPRAISAL: DEVELOPMENT PROJECTS OBSERVED

The research that resulted in Hirschman's 1967 book, *Development Projects Observed*, rested on the same methodological approach as *Journeys*. Although the book does not contain the stories of the individual projects studied by Hirschman, the research had an 'intensive concern with "cases"' and all the projects considered had 'an extended history'. 'Immersion in the particular,' Hirschman claimed, 'proved . . . essential for the catching of anything general' (Hirschman 1967, 3). The book was the result of Hirschman's collaboration with the World Bank, the Brookings Institution, the Ford Foundation and the Carnegie Corporation to study some general elements of project appraisal or, as he put it, 'to explore in detail the direct effects as well as the broad repercussions of a project on economy and society' and to reach 'some improvements in the process of project evaluation and selection'.¹⁰ An additional purpose, after two books based exclusively on Latin American cases, was for Hirschman to broaden his expertise to Asia and Africa.

Hirschman selected 13 World Bank projects and travelled to Latin America, Asia, Southern Europe and Africa between July 1964 and August 1965 to study them in detail. Bank officers were enthusiastic: 'Probably for the first time', remarked a senior economist, 'the contemporary theory and practice of project appraisal in infra-structure will be subjected to a systematic *ex post* methodological scrutiny on a wide basis.'¹¹ This was all the more important since the World Bank had not yet established an internal and independent evaluation function.

Back from his travels, Hirschman circulated a memo with some preliminary observations. These focused on what he called 'Behavioral characteristics of development projects in different sectors'. As he put it: 'having learnt in fairly rapid succession about a wide variety of projects, I became alerted to the characteristic advantages or handicaps under which power projects, say, proceed as compared to irrigation projects'.¹² The principal aim of Hirschman's interim observations was clearly methodological. Far from addressing questions such as the economic return of World Bank loans or the traditional distinctions of infrastructure versus agricultural and industrial projects, or human versus physical capital, Hirschman focused on questions such as the degree of uncertainty in a project:

the element of the unknown, the uncertain and the unexpected which deflects projects from the originally chartered course is considerable in all projects. But it is far more important in some projects than in others and it may be of interest to the Bank to gain an approximate idea about the principal determinants of this uncertainty.¹³

Among these determinants, Hirschman listed the existence of visible linkages between

¹⁰ Albert O. Hirschman, 'A Study of Completed Investment Projects which Have Received Financial Support from the World Bank', June 1963, World Bank Hirschman Folders, Vol. 1, WBGA. This and the following documents are discussed in more detail in Alacevich (2014). See also Alacevich (2015).

¹¹ Dragoslav Avramovic to Department Heads, IBRD and IFC, 'Investment in Developing Countries – Effects, Expectations and Reality', 18 February 1964, World Bank Hirschman Folders, Vol. 1, WBGA.

¹² Albert O. Hirschman, 'A Study of Selected World Bank Projects – Some Interim Observations', August 1965, World Bank Hirschman Folders, Vol. 1, WBGA.

¹³ Ibid.

the project's new supply and local demand, and the influence of social and political variables. In addition, Hirschman discussed the difficulty of calculating benefits and measuring results in several types of projects. This change in perspective called for a corresponding change in the Bank's behavior. The Bank, Hirschman wrote, should avoid the 'air of pat certainty' that emanated from the prospects of new projects, and instead expose the uncertainties underlying them. Moreover, the Bank should take into account the distributional and the social and political effects of its lending. Focusing only on the technical merits of a project, Hirschman concluded, was not enough.¹⁴

It is no wonder that Bank staff, initially delighted when Hirschman started his study, were instead upset when those first observations were circulated. The final outcome of Hirschman's research, his 1967 book, *Development Projects Observed*, did not help to defuse tensions. In it, Hirschman focused on the side-effects of projects and described project appraisal as the art of visualizing them. In his definition, side-effects were not just 'secondary effects': they were 'inputs essential to the realization of the project's principal effect and purpose'. They were equally essential for the project to mature into a long-lived endeavor (Hirschman 1967, 161). What was the difference, for instance, between a highway project and a railway project? A side-effect of investment in highways is that it develops the heavy motor vehicle industry and thus enhances entrepreneurship. But 'entrepreneurship means political power, which in turn means the ability to change the rules of the transportation game decisively in favor of the highways' (Hirschman 1967, 162). A secondary effect, in other words, may become a decisive element for the future of transportation policies in a given country.

With this methodological approach to project appraisal, it is not surprising that Hirschman believed that cost-benefit analysis was an excessively rigid process, hampered by too many arbitrary assumptions. The search for a yardstick to rank potential projects was, according to Hirschman, a futile exercise. He wondered:

How could it be expected that it is possible to rank development projects along a single scale by amalgamating all their varied dimensions into a single index when far simpler, everyday choices require the use of individual or collective judgment in the weighing of alternative objectives and in the trade-off between them? (Hirschman 1967, 179)

Hirschman was suspicious of cost-benefit analysis because he thought its allegedly 'scientific' index offered no useful tools for better policy-making. 'Each project', Hirschman remarked, 'turns out to represent a *unique constellation* of experiences and consequences, of direct and indirect effects. This uniqueness in turn results from the varied interplay between the structural characteristics of projects, on the one hand, and the social and political environment, on the other' (Hirschman 1967, 186). Uncertainties and latitude (whether and how a project can be turned in one direction or another regardless of outside occurrences) condition a project's functioning and outcome, and they must be at the center of the appraising exercise. Hirschman's goal, however, was not to recommend all-encompassing appraisal criteria. Rather, his attempt was 'to provide project planners and operators with a large set of glasses with which to discern probable

¹⁴ Ibid.

lines of project behavior, in the expectation that the analysis of each individual project would require different and rather limited subsets of the full set of glasses which has been exhibited' (Hirschman 1967, 186).

As interesting and stimulating as Hirschman's approach was, it offered few elements for World Bank officers to make project appraisal operational. How could Hirschman's analysis be embedded in an organizational routine for internal evaluation? As a World Bank senior manager put it, the book:

is well written and contains a number of interesting observations. But by and large it does not contain any operationally useful analysis of the merits and priority of the particular projects observed by Professor Hirschman or of the kind of reshaping or rethinking of the projects which might have made them better. In short, I for one gained no significant new insights into the process of project preparation and evaluation.¹⁵

Hirschman's attempt to establish a qualitative approach to project appraisal was based on detailed historical reconstruction of the 'personal profiles' of projects as well as their larger political and social context. It aimed at underscoring 'the element of the unknown, the uncertain and the unexpected', as Hirschman put it, in order to understand what caused projects to change direction from their originally charted course. Finally, the goal was to assess the broader political, social and economic impact of a project. Hirschman's approach to project appraisal was a natural evolution of his previous work, which had underscored his increasing distance from the early debates in development theories. The apparent 'failure of several of the earlier ideas as *practical* policy solutions', as Tony Killick (1978, 27) put it, prompted Hirschman's detailed examination of the mechanisms of economic policy-making in *Journeys* and project appraisal in *Development Projects Observed*. But while Hirschman and the World Bank had agreed on what was needed, they ultimately disagreed on how to meet this need. Hirschman tried to transform the Bank's approach to project design, management and appraisal. The Bank, instead, expected Hirschman to make project design and management somehow more measurable, predictable and scalable. World Bank officers asked Hirschman to collaborate on an operational version of his book, but this ultimately did not see the light, primarily because of Hirschman's lack of interest in the project.¹⁶

When a few years later the World Bank established an Operations Evaluations function, Hirschman's work was virtually forgotten. Project appraisal and evaluation was solidly based on the cost-benefit analysis approach pioneered in the 1920s and 1930s for water-resources development and public investment activities and further developed in the 1960s and 1970s by a new wave of studies, such as those by Ian M.D. Little and James A. Mirrlees (1968, 1974) and Partha Dasgupta, Steven Marglin and Amartya Sen (1972). Although these studies did not ignore the role of uncertainty in project design

¹⁵ Richard H. Demuth to Mr. Robert E. Asher, 13 September 1966, World Bank Hirschman Folders, Vol. 2, WBGA.

¹⁶ Herman G. van der Tak to Professor Albert O. Hirschman, 20 December 1966, World Bank Hirschman Folders, Vol. 2, WBGA; Herman G. van der Tak to Professor Albert O. Hirschman, 18 January 1967, World Bank Hirschman Folders, Vol. 2, WBGA; Albert O. Hirschman to Mr. Alexander Stevenson, 1 May 1967, World Bank Hirschman Folders, Vol. 2, WBGA; Alexander Stevenson to Professor Albert O. Hirschman, 18 May 1967, World Bank Hirschman Folders, Vol. 2, WBGA.

and appraisal, in practical matters they tended to conflate this term with what is usually meant by 'risk', that is, something subject to measurement. Hirschman, instead, following the dichotomy between 'risk' and 'uncertainty' put forth by Frank Knight, considered uncertainty impossible to measure. As he wrote in the early 1960s, 'it is clearly impossible to specify in advance the optimal doses of . . . various policies under different circumstances. The art of promoting economic development . . . consists, then, in acquiring a feeling for these doses' (Hirschman and Lindblom 1971 [1962], 83–84).

THE CRISIS OF DEVELOPMENT ECONOMICS

Development Projects Observed was the last major work in Hirschman's opus on development. Although he would remain interested in development issues for his entire life and would publish further important essays on development questions, his subsequent book, *Exit, Voice and Loyalty* (1970), belonged to the broader social sciences. For its part, development economics was by then entering a process of decline. While the promise of rapid economic expansion had motivated an entire generation of economists between the 1940s and the 1950s, the failures of the subsequent development strategies shattered the foundations of the field. Hirschman's tone was particularly mournful in acknowledging the crisis of development economics:

Some twenty-five years later, that early optimism has largely evaporated, for a number of reasons. Growth, while substantial, has by no means overcome the division of the world into the rich 'north' and the underdeveloped 'south'. In the south itself, moreover, the fruits of growth have been divided more unevenly than had been anticipated. And there is another, often unacknowledged reason for the disenchantment: it looks increasingly as though the effort to achieve growth, whether or not successful, brings with it calamitous side effects in the political realm, from the loss of democratic liberties at the hand of authoritarian, repressive regimes to the wholesale violation of elementary human rights. (Hirschman 1981a [1979], 98–99)

Especially for a scholar like Albert Hirschman, whose work was guided by a reformist perspective and was equally distant from the opposing options of revolution and acceptance of the status quo, the blow was strong. Hirschman wrote that 'little light had been shed on the connections between economic growth and political disasters by my contemporaries' (Hirschman 1981a [1979], 99), but his own work was similarly exposed to this kind of critique, especially that celebration of reform-mongering that was *Journeys Toward Progress*. When Hirschman, in the early 1960s, was circulating the drafts of his country studies and later, when the book was published, several scholars noticed his excessive optimism. David Felix, reviewing the book, joked that while *The Strategy of Economic Development* might well be subtitled, paraphrasing a seminal article by W. Arthur Lewis, 'Economic Development with Unlimited Supplies of Labour, Foreign Exchange and Everything Else Except the Will to Invest', *Journeys Toward Progress* could be similarly be subtitled 'Social and Economic Reform with Unlimited Amounts of Time', for Hirschman's optimism rested on the judgment that after many false starts, the Brazilian, Chilean and Colombian governments would eventually focus on solving their long-lasting problems (Felix 1964, 202). The US Ambassador to Brazil, who read a draft

of Hirschman's analysis of the drought problem in the Nordeste, commented that things 'may well go worse before they go better'.¹⁷

HIRSCHMAN'S DEVELOPMENT LEGACY

The analysis above seems to suggest that, after all, Hirschman's legacy in development economics has been rather limited. Nothing comparable to the pervasiveness of a Harrod–Domar model – rigid and mistaken though the foreign-aid policies based on that model were – could be mentioned in the case of Hirschman's legacy to development thinking. The balanced- versus unbalanced-growth approach diatribe defined the borders of early development economics but had only limited influence on the actual policies of development institutions. Even champions of one or the other approach, when confronted with the implementation of development projects, picked eclectically from seemingly incompatible theories. Thus, alleged balanced-growth supporters and comprehensive planners in Colombia thought in terms of linkages and inducement mechanisms *à la* Hirschman, while Hirschman praised the comprehensive approach of the regional development agency of Northern Brazil. Furthermore, Hirschman's *Journeys*, although highly stimulating, complex and interesting, was weak in terms of predicting future paths of reform in Latin America. Finally, the analytical recommendations in *Development Projects Observed* were quickly left behind by its major prospective client, the World Bank, and the whole field of project appraisal and operations evaluation all but forgot Hirschman's pioneering studies, focusing instead on cost–benefit analysis.

Yet, Hirschman has been a pioneer in many aspects of postwar development studies, and he has remained an influential thinker for development matters, if not in any particularly structured way – certainly not in a 'school', but surely from a methodological point of view. The crisis of development economics, paradoxically, may have helped.

Development economics as an autonomous disciplinary subfield no longer exists. In 1981, Hirschman made a very interesting, if biased, contribution to defining this discipline's specific identity. Development economics, he wrote, was defined by two connected claims. The first was the rejection of mono-economics, that is, the claim that underdeveloped countries 'are set apart, through a number of specific economic characteristics common to them, from the advanced industrial countries', and thus traditional economic analysis, which has historically focused on economically advanced countries, must be significantly recast to deal with underdeveloped countries. The second was the mutual-benefits claim, that is, the view that both developed and developing countries can yield economic gains from mutual economic relations (Hirschman 1981b, 3).¹⁸ In recent years, a prominent development scholar, Dani Rodrik, has argued instead that what matters is not to apply different theoretical frameworks to different realities such as developed and less-developed countries, but rather to apply different recipes based on the same economics. Ironically, for his 2007 book, unequivocally titled *One Economics, Many*

¹⁷ Lincoln Gordon to Albert O. Hirschman, 3 September 1963, quoted in Adelman (2013, 380).

¹⁸ This was a particularly restrictive definition, as it excluded from the territory of development economics structuralist and dependency theorists who argued that trade relations between developed and underdeveloped countries were disadvantageous for the less-developed countries.

Recipes (2007a), Rodrik was awarded the Albert O. Hirschman Prize, the highest award of the Social Science Research Council. But even though Rodrik may be at variance with Hirschman's old definition of development economics, his methodological approach is instead very much in line with Hirschman's thought. For example, Rodrik has consistently underscored the need for pragmatism, policy experimentation and deep knowledge about local contexts against general 'best practices' or rules of thumb. Similarly, he has privileged selective approaches to policy reform or – in his words – 'hitting the right targets and not doing everything at once' (Rodrik 2007b, 5).¹⁹

If development economics has disappeared as a discipline, the problem of development is still very much alive in public and scholarly debate. Liberated from identity questions, the development field is thriving again, and its approach is much more eclectic than before. Among the major features of the so-called new development economics, Dani Rodrik (2008, 27–28) has emphasized its being experimental (in the broad sense of 'a predisposition to find out what works through policy innovation'), based on monitoring and evaluation, aimed at selective and targeted reforms, focused on policy reforms and diagnostic rather than presumptive; all features that have a distinctive 'Hirschmanesque' flavor. In addition, it should be noted that Hirschman's approach has always had a strong influence on the Latin American development discourse (Adelman 2008; Ocampo 2008).

A central element of Hirschman's approach, of which current development scholarship is only partially aware, is the importance of the historical perspective. The importance of detailed historical analysis in *Journeys Toward Progress* and *Development Projects Observed*, as well as Hirschman's interest in reconstructing the 'personal profiles' of specific projects or questions, have been noted. But Hirschman's historical sensitivity was evident even in his most theoretical works. Sequences, inducement mechanisms, linkages are processes that unfold through time, and like all historical processes, they are intrinsically uncertain and open to unexpected shifts and turns and do not fit in any preordained framework. Hirschman highly valued historical analysis to discover perhaps hidden but nonetheless open possibilities for change and reform. As he put it in a 1980 talk:

Following in detail the process of a revolution gives us a strong feeling, as the structuralist approach does not, for the many might-have-beens of history . . . As a result, the event-minded historian is less likely than the sociologist to declare that, given such a structural condition, the outcome was preordained. [This] emphasis on the revolutionary process . . . in effect promises to restore a few degrees of freedom we were in danger of losing to the structuralists. (Hirschman 1986 [1980], 171–172)²⁰

¹⁹ For Hirschman's affinity to other scholars in the development field, see Ellerman (2001a, 2001b).

²⁰ For one more testimony to Hirschman's sensitivity to the role of historical reconstruction, see his opinion of Marx's work: '*The Eighteenth Brumaire of Louis Bonaparte* was a particularly fine work. His historical books were much less orthodox than his economic ones . . . I like to understand how things happen, how change actually takes place' (Hirschman 1998, 67).

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25. Michal Kalecki

*Jayati Ghosh**

The remarkable Polish economist Michal Kalecki (1899–1970) is probably the most significant of the now-neglected voices among twentieth-century economists. The non-conformism and integrity that characterized his professional life and approach to economics also meant that he was relatively unsung even in his own lifetime, despite his enormous theoretical contributions. It is not only his major insights into the working of capitalist economies that are of value: Kalecki also contributed hugely to the understanding of the specificities of the process of economic development and identified critical characteristics of developing economies that necessitated different kinds of analyses. Most of his work is concise to the point of being terse, in the form of short articles that simply state some crucial principles, typically without much elaboration. Nevertheless, they are so full of insight and sharp analysis that they can still constitute the basic theoretical armoury for the study of economic development. What is even more remarkable is that, although these pieces were generally written in the mid-twentieth century in a period when closed economy models dominated and many developing economies were experimenting with import-substituting industrialization, they remain very relevant in a context in which globalization has rendered other analyses based on closed economy assumptions obsolete. Indeed, almost all of his work has strong contemporary resonance and can still be usefully applied to understanding economic policies and processes in the twenty-first century.

Understanding capitalism in all its forms was, of course, an essential part of his intellectual approach. Kalecki worked out the essentials of what is now known as ‘Keynesian’ economics well before the publication of Keynes’s *General Theory*, working independently and coming from a very different theoretical tradition derived from the work of Karl Marx. But there was sustained lack of appreciation of the originality and significance of his work in the mainstream English-language academe. This was true especially of his seminal work on the macroeconomics of developed capitalism. Despite Joan Robinson emerging as his champion, there was almost no transatlantic recognition or even knowledge of Kalecki’s contribution, and even to this day mainstream economists either assume that the major insights into unemployment equilibrium were all the fruits of Keynes’s work, or restate many of Kalecki’s propositions today as if they were entirely original and new.

Kalecki’s early work on business cycles established some of the basic principles: the importance of effective demand in driving the short-run dynamics of the system, the possibility of involuntary unemployment and the inherently cyclical character of change in a laissez-faire capitalist economy. His description of both short-run and long-run

* This is a modified and revised version of a chapter that appeared in Jomo K.S. (ed.) (2005), *Pioneers of Development Economics*, London: Zed Books.

dynamics of advanced capitalism had greater richness and complexity because he was not hampered by a reliance on standard equilibrium analysis but was rather working with the inherently more dynamic notions of investment, oligopolistic behaviour, technical progress and the like. Unlike Keynes (whose theoretical framework remained essentially Marshallian) Kalecki based his analysis on the Marxian reproduction schemes which made a distinction between investment goods and consumption goods. He distinguished between those variables that become active determinants of levels of income (such as investment, export surpluses, government deficits) and those which are passive outcomes of the process (such as workers' consumption).

Like Keynes, Kalecki emphasized that while *ex post* savings and investment are equal, it is investment that is the active factor that determines savings; furthermore the equality is not brought about by changes in the rate of interest (which he recognized to be a policy variable) but by changes in the level of economic activity. This is because Kalecki believed that in general there is unutilized capacity in capitalist economies. Within investment, he made the important distinction between investment decisions and actual investment outlays (which follow with a time lag). This is important because investment operates immediately to increase the level of output, but also raises capacity, and the increased capacity affects investment decisions in the next period. This in turn limits future output and over time creates a pattern of cyclical movement of output. This paradox, which is peculiar to capitalism, was summed up by Kalecki (1937, 77) as follows: 'The tragedy of investment is that it causes crisis because it is useful.'

Kalecki's theory of price formation was critical in relating aggregate income to its distribution in advanced capitalist economies. In Kalecki's model, capitalists are assumed to spend on investment and luxury consumption; workers spend on wage goods and do not save. The prices of primary products (or raw materials) are determined by demand and supply; the prices of other products are cost-determined with oligopolistic mark-up. This mark-up in turn depends upon the 'degree of monopoly', which reflects forces such as the extent of concentration of production, the requirements and extent of sales promotion and the bargaining power of workers. Therefore the mark-up is not constant over time, but reflects economic and political dynamics. The Kaleckian multiplier emerges from the wage share of national income as well as the propensity to consume out of profits. The share of profits in income depends upon the degree of monopoly, while the amount of profit realized over a period depends upon capitalists' expenditure.

In this formulation, government intervention can prevent cyclical behaviour and allow for full employment. It is also not seen as necessary for the government to run continuous budget deficits to achieve this, since the expenditure can be met by taxing profits, which would simply reduce profits to the level that existed before the increase in government expenditure, while ensuring higher levels of production. But even loan-financed government expenditure can achieve the goal, so that 'in this way, one of the basic contradictions of the capitalist system is solved by a sort of financial trick' (1993 [1966], 14). While this may appear to be strange, it reflects the tendency of unemployment of resources through the inadequate effective demand which is inherent in the capitalist system. 'The artificiality of the underemployment of resources is overcome by the artificiality of the financial trick consisting of loan-financed *ad hoc* government expenditure' (1993 [1966], 14).

The most rational course for a government wishing to increase public spending in a

context of unemployment would be either to spend on investment and therefore contribute to future development, or to increase expenditure or reduce taxation in such a way as to improve the consumption of the masses. But in general in advanced capitalist countries, Kalecki felt that the means chosen is neither of these, but rather government expenditure on armaments. This is wasteful and destructive but nonetheless preferred by workers in developed countries, because it provides levels of employment and wages that would otherwise not be possible in the absence of such spending. However, Kalecki maintained that continuous full employment is unlikely under capitalism, because of opposition from the domestic capitalist class. In his famous 1943 paper 'The Political Aspects of Full Employment' (Kalecki 1971 [1943]), he argued that capitalists would oppose such levels of government expenditure not only from a dislike of government interference in general and the direction of public spending in particular, but even more crucially because of the social and political changes (essentially, greater bargaining power of workers) resulting from the maintenance of full employment. His was therefore the first, and is still the most useful, model of a 'political business cycle'.

He was also well aware of the significance of external markets in playing a role similar to government expenditure for a mature capitalist economy (Kalecki 1954, 52). He described the government deficit as 'internal exports' to be compared with the 'external' profits to be had from imperialist interaction with other less developed economies:

The fight for the division of existing foreign markets and the expansion of colonial empires, which provide new opportunities for export of capital associated with export of goods, can be viewed as a drive for export surplus, the classic source of 'external' profits. Armaments and wars, usually financed by budget deficits, are also a source of this kind of profits.

According to Kalecki, there is nothing in the mechanics of advanced capitalism that makes long-run growth inevitable. However, two semi-exogenous factors interact to produce patterns of long-run economic change. The first is innovation, which Kalecki defined to include not only technological progress per se, but also the introduction of new goods, the opening up of new markets, organizational changes, and so on. This obviously has a positive effect: the higher the intensity of innovation, the higher the rate of growth of the economy. The other constraining factor is 'rentier savings', that is, savings outside firms, which depress investment and therefore inhibit growth. The relative strength of these two factors determines the long-run rate of growth. The contemporary relevance of this argument, in a world of rapid technological progress but also of financial liberalization and growth of rentier incomes, is worth noting.

The process of growth is naturally intertwined with development, but the two are obviously not the same, nor is one necessarily always associated with the other. Kalecki's approach to the problems of economic growth and change in the South was influenced to a significant extent by both his understanding of developed capitalist economies and his work on planning in socialist countries. However, he was always careful not to mechanically reproduce conclusions that were relevant in those contexts to other, rather different situations. He identified critical features of developing economies that made them fundamentally different from advanced capitalist economies and was sensitive to the important roles played by particular social, political and economic configurations and historical processes in affecting both macroeconomic processes and economic policy

outcomes. He recognized that economics is ultimately about politics and that any analysis of an economy that seeks to abstract away from the socio-political determinants and implications of economic phenomena (including distributive effects) would be not only inadequate, but plain wrong.

The essentials of the theoretical framework developed by Kalecki for developed capitalist economies were utilized by him for analysing capitalist or 'mixed' developing economies as well. Thus, the pattern of price formation remains the same, with the prices of primary commodities being determined by the interaction of demand and supply, while finished goods prices reflect oligopolistic mark-up. Political influences upon economic policies and processes also remain critical. However, in some major respects, the stylized facts that Kalecki observed were different for developing economies, and this meant that both economic mechanisms, and the government policies that could be used to influence them, changed.

Kalecki saw the difference in the nature of unemployment as the most critical macroeconomic distinction to be made between developed and developing non-socialist economies. In developed capitalist economies, as described above, unemployment was seen to be related to the inadequacy of effective demand. This, in turn, meant that in a context of idle productive capacity, measures such as increasing government expenditure in order to raise the level of aggregate demand, through the 'financial trick' outlined above, would be effective in tackling the problem. In underdeveloped economies, however, Kalecki viewed the problem of unemployment (or underemployment) as structural, resulting from the basic and endemic shortage of capital equipment as well as bottlenecks in the supply of necessities. The solution to the problem was therefore also seen to be different and more difficult, since in such a context increased government expenditure could simply add to inflationary pressure.

This point became so central to all of Kalecki's subsequent analyses of development that it deserves greater elaboration. Kalecki did not deny that in an underdeveloped economy there may be a deficiency of effective demand, or that even the meagre level of capital equipment that exists could be underutilized. However, he argued that the basic difference is that even if all the available capital equipment were to be utilized, it would still not absorb all the available labour force. This, in turn, means that the standard of living is typically low for the broad masses of the population. This makes the solution to the unemployment (or underemployment) problem more complicated and harder to do, since it must necessarily involve an expansion of productive capacity.

Therefore, the central macroeconomic issue in a developing economy becomes that of increasing investment. Kalecki envisaged three important obstacles to such a strategy. The first is that private investment may not be forthcoming at the desired rate. Of course, in such a case, government investment can fill the gap, although the crucial issue of financing such government investment remains significant. Second, there may be no physical resources to produce more investment goods. In this case, Kalecki mentioned the possibility of using foreign trade, that is, importing such investment goods, financed either through increasing exports or through reducing non-essential imports. Third, there is the problem of ensuring an adequate supply of necessities to cover the demand resulting from increased employment. Shortage of necessities (especially food) would create an inflationary problem, which would not be overcome through taxation of profits and which would involve real wage declines, which Kalecki found to be unacceptable. This

could be avoided if an increase in the supply of necessities matched the growing demand for them, in accordance with a planning process. However, Kalecki noted the considerable political and practical obstacles to introducing some sort of planned economy and extensive government control upon private economic activity.

Indeed, it was the political obstacles that Kalecki found to be the most critical, because of the adverse reaction of domestic and foreign capitalists as well as other vested interests such as land-owning elites. There would inevitably be opposition to some of the requirements of balanced development, such as increasing public expenditure by taxing the rich and altering agrarian relations. This is why, according to Kalecki, rapid but balanced economic development is so rarely to be found in practice, and instead two extreme patterns (or variations of them) are more commonly observed among underdeveloped economies: either non-inflationary but slow growth, or relatively rapid growth accompanied by violent inflationary pressures.

This meant that for Kalecki the basic condition for breaking out of the cycle of economic backwardness was a substantial increase in agricultural output (since food dominates in the basket of necessities). In this context, he recognized the basic constraint posed by property relations (particularly those relating to ownership and control over land) and emphasized the need to change both ownership and land-tenure regulations as necessary preconditions for non-inflationary redeployment of labour surpluses for industrialization. He even argued that the agrarian constraint could prevent industrial growth not just from the supply side but also from the demand side. This point deserves to be emphasized, since his analysis helps in showing that a demand problem may coexist with the problem of inflation in developing countries. This insight became important in subsequent discussions of development experience in India (see Chakravarty 1993) and elsewhere.

The argument was briefly stated as follows:

It may be shown that in some cases the rigidity of the supply of food may lead to the underutilization of productive facilities in non-food consumption goods. This will not be the case if the peasants profit from the increases in food prices, because then they buy more industrial consumption goods out of their higher incomes. However, if the benefits of higher food prices accrue to landlords, merchants or moneylenders, then the reduction in real wages due to the increase in food prices will not have as a counterpart an increased demand for mass consumption goods on the part of the countryside; for increased profits will not be spent at all, or will be spent on luxuries. In this case, the high demand generated by a rapid development involving large-scale investment will not create a market for industrial mass consumption goods. (Kalecki 1972 [1955], 29)

This is why Kalecki emphasized that investment in infrastructure and industry must be accompanied by measures to expand agricultural production in the long and short terms. Possible measures, according to Kalecki, ranged from land reform and cheap bank credit for the peasantry to technological changes in cultivation practices, small-scale irrigation and provision of cheap fertilizers and other inputs. Such analysis was relatively unusual at the time, when most development economists were focused single-mindedly on increasing industrial growth. But this idea, advocated in the mid-1950s, was vindicated by the food shortages that emerged across many developing countries a decade later. It was to prove extremely influential and made Kalecki an unwitting founder of the structuralist school

in Latin America and elsewhere, which attached critical importance to structural factors in the development process. Even in our globalized times the criticality of domestic food production has re-emerged as a development concern after a decade of high and volatile global food prices.

The need to ensure non-inflationary (and therefore 'balanced') development was so important for Kalecki that the issue of financing development assumed centrality in his discussion of development. This is because he took the danger of inflation in developing countries extremely seriously. The fundamental reason for his abhorrence of inflation was its effect in reducing real wages, which he regarded as unacceptable.¹ The most obvious reason for such distaste was in terms of an ethical opposition, since in both developed and developing capitalist economies (and indeed, even in socialist economies) Kalecki resisted the possibility of financing growth at the expense of the working class. In poor countries with an already low level of workers' incomes, a reduction in real wages was all the more impossible for Kalecki to accept. Therefore the assumption that real wages must not fall was for him the starting point of any development strategy.

In addition, Kalecki was opposed to inflation because he believed that persistent inflationary pressures led to excessive and unproductive hoarding of stocks; to capital flight, currency speculation and consequent balance-of-payments difficulties; as well as to disturbances in the investment process itself. He felt that these consequences could make inflation permanent (in an early anticipation of what has become known as 'inflation inertia') and could even retard or stop the development process itself. He also recognized that intensifying inflationary pressures give rise to political tensions that the ruling classes in developing countries find dangerous and which are therefore sought to be reduced by importing necessities financed through foreign capital inflows. Part of the problem is that the capitalist growth process itself generates inequalities and deflects resources into luxury consumption, which is why balanced development also requires measures to control growing inequality of incomes.

In the current mainstream dogma about inflation, monetary measures are given supremacy, and indeed inflation control is typically viewed as the main function of central banks. However, Kalecki reiterated that the issue of avoiding inflationary pressures in the course of economic development is not a 'monetary' one at all, but rather is solved by assuring a correct structure of national expenditure. This requires that the supply of necessities be in the desired relation to the level of national income; that expenditure on non-essential consumption is sufficiently restrained so as to provide adequate savings for the financing of both public and private investment; and that private investment is sufficiently restrained so as to allow for the financing of public investment.

In all of Kalecki's writings on development, the issue of financing of economic growth received probably the most attention. The problem was not seen in purely monetary terms, but in terms of the more critical issue of the distributive implications of financing: that is, which groups in society (or outside) would bear the burden of increasing capital formation through reductions in consumption. For Kalecki, desirable economic

¹ It is interesting to note that as early as 1953, such a position had brought Kalecki (who was at that time working at the Economics Department of the United Nations) into conflict with economists at the World Bank and International Monetary Fund (IMF), who saw lowering wages as a means of improving external competitiveness and allowing for domestic stabilization.

development necessarily involved no inflationary price increases of necessities, especially staple foods; no taxes levied on lower-income groups or on necessities; and effective demand being restrained only through raising direct taxes on higher-income groups or indirect taxes on non-essentials. This squarely puts the burden of financing investment on richer groups in the society, but it also entails larger domestic agricultural output.

As he argued, 'There are no financial limits, in the formal sense, to the volume of investment. The real problem is whether this financing of investment does, or does not, create inflationary pressures' (Kalecki 1972 [1955], 25). And this of course depends upon the possibility of expansion of the supply of mass consumer goods in response to increased demand. Clearly, an increase in investment under conditions of inelastic food supply would cause a fall in real wages and would consequently generate an inflationary wage-price spiral. But this need not be associated with a substantial increase in demand for mass consumption goods produced by industry. This is why the expansion of the output of food is of central importance in the process of development, and why he stressed measures that would improve land productivity for agriculture. It could be argued that increases in industrial productivity would have the same effect. However, Kalecki noted that while an increase in food supply tends to raise real wages at a given level of non-agricultural employment, an increase in industrial productivity increases real wages through reducing employment at a given level of non-agricultural output. It is easy to see which alternative is preferable in a labour-surplus developing economy.

This approach also makes it clear why Kalecki emphasized the direct taxation of profits or the indirect taxation of luxury consumption items; not only to ensure resources for public investment, but also to prevent public investment from increasing profits and therefore capitalists' luxury consumption. In fact, this was seen to be an absolutely essential role of government in the industrialization process: to extract a part of private capitalist profit through taxes and to use it for capital formation, which would also benefit the capitalists over time. However, such taxation would not neutralize the potentially inflationary impact of higher public investment.

It is noteworthy that Kalecki was quite sceptical of the use of foreign capital to finance this necessary investment for development. On the one hand, he recognized the importance of foreign capital inflow to enable essential imports, including of capital goods for industrialization, and that such inflows could ease the domestic financing problem by allowing food imports. However, he felt that in general foreign capital presents problems of a very basic nature for a developing economy. Foreign direct investment tends to occur in areas (such as the production of raw materials for export) which may not be in line with the basic development plan of a country. In addition, profits transferred abroad can exceed the cost of servicing a foreign loan, while reinvested profits could simply add to the book value of foreign investment with no further inflow of capital. Foreign credits, or external commercial borrowings, involve interest repayment which can become a heavy burden in the future. Even foreign aid is problematic because of all the successive dislocations caused by additional imports financed through such aid.

In this context, Kalecki (1993 [1966], 66) proposed two criteria for evaluating foreign aid, which remain extremely relevant to assess all forms of foreign capital inflow. First, to what extent has this inflow improved the country's balance-of-payments position; and has this improvement been used to remove the bottlenecks in the supply of capital goods, necessities, luxuries or intermediate goods? Second, were the additional financial

resources instrumental in raising the rate of growth by increasing investment over the level of domestic savings or releasing local savings for consumption; and if they did so, did they finance an increase in the consumption of necessities, of luxuries, or materialize in a higher volume of social services?

Even the most cursory examination of the experience of the past two decades will suggest that according to these basic criteria, most of the foreign capital inflow into developing country 'emerging markets' in the era of globalization did not achieve these most obvious goals of development. Thus, Kalecki's scepticism appears to be amply vindicated even by very recent international experience. Indeed, Kalecki noted that, given the difficulty of securing desirable forms of foreign capital inflows into developing countries, it may be preferable for them to consider means of preventing capital export, which amounts to the same thing in terms of releasing foreign exchange resources. Here he noted that what must be regulated is not only visible capital flight, but also hidden transfers (such as through over-invoiced imports and under-invoiced exports), which are often of even greater quantitative significance. Another route could be to reduce the dividend repatriation by foreign enterprises. He also pointed out that an improvement in the terms of trade has an effect analogous to capital inflows, without all the attendant difficulties of foreign capital. Conversely, of course, deterioration in the terms of trade can take away the benefits of productivity growth in the export sector.

A substantial proportion of Kalecki's work was devoted to the analysis of planning in socialist economies. Some of this continues to have substantial relevance for growth and planning even in mixed or capitalist developing economies, since the basic principles he elaborated still determine the possibilities for long-run growth. While Kalecki opposed some of the excesses of central planning, he was also whole-heartedly against the idea of 'market socialism' since this gave play to the capacity of the market to make wrong macroeconomic decisions. However, even under central planning certain contradictions persist, most significantly the trade-off between current and future consumption. He recognized that resolving this necessarily required political compromise, since it could not be reduced to purely economic considerations. The other factor limiting freedom of choice in planning was the emergence of long-run development bottlenecks, such as limited natural resources, shortages of certain kinds of skilled labour and difficulties of adapting technological changes. He saw that all of these gaps could be bridged through foreign trade, but that would be at the expense of widening trade imbalances. This made him stress the need for moderate and realistic plans rather than very ambitious growth targets.

A similar approach made him take a particular attitude with respect to the debate on choice of techniques in a developing country. The Dobb-Sen strategy (proposed by Maurice Dobb and Amartya Sen) relied on maximizing investible surpluses, maintaining constant real wages and using the entire increase in labour productivity to raise the rate of accumulation. Kalecki opposed the assumptions made in this argument, of unchanging technology (that is, no technological progress) and 'instant' recasting of the economy into a higher capital-output ratio. In addition, he felt that most capital-intensive techniques would have to be imported, making them even less attractive. He argued that 'the more capital-intensive technique is not *per se* either superior or inferior: the choice of "right" capital intensity depends upon the availability of labour (allowing for technological limitations and maintenance of real wages)' (Kalecki 1967, 94). Kalecki's solution therefore preferred the technique that maximized output rather than surplus. Indeed,

he considered labour-intensive techniques of production to be preferable in general for developing countries with large labour reserves, except only in those sectors where the technology did not allow it. Even in agriculture, he was against mechanization since he felt it usually did not increase output per acre but only output per worker, thereby creating rural unemployment. He emphasized instead ways of intensifying agricultural production in labour-intensive ways.

Chakravarty (1993) noted that since Kalecki dealt with vertically integrated sectors in his formulation, this effectively short-circuited some of the intersectoral relationships in a growing economy. He also therefore missed out on the potential significance of the self-reproducing capital-goods sector, which played such an important role in the planning models of Fel'dman and Mahalanobis, among others. While Kalecki did not address this range of questions, his insights into the planning process remain significant.

The discussion thus far has shown that Kalecki was acutely sensitive to the political pressures and constraints that informed the process of development and was also well aware of the complex interaction between the power of different classes and groups, economic policies and their growth and distribution outcomes. Some of this consciousness, which actually permeated most of his work, was crystallized into a more specific formulation regarding 'intermediate regimes'. This is how he characterized some developing countries in which, according to him, the old feudal classes had been dispossessed and large capital had not developed, so that political power at independence had passed into the hands of the lower-middle classes and peasantry. He characterized countries such as India, Egypt and Bolivia, for example, as 'intermediate regimes' and gave rise to a substantial, if controversial, literature on the subject.² He argued that such a group, to stay in power, must gain a measure of independence from foreign capital, carry out land reform and assure continuous economic growth. This means that the government comes into conflict with 'comprador' elements as well as with feudal landlords. Kalecki noted that it was possible that over time the lower-middle class could become subservient to big business, but that this is often prevented by the basic weakness of this class and its inability to undertake large-scale investment. This means that the basic investment for economic development must be carried out by the state, which is why lower-middle-class interests are amalgamated with those of state capitalism. Such state capitalism favours the lower-middle classes (including small-scale businesses) and the peasantry but continues to suppress the poor peasantry and rural proletariat, as well as urban workers.

Whatever one may think of the applicability of this analysis – and there have been numerous criticisms of it with reference to particular countries that Kalecki thought it applied to – there is no doubt that it represents an original and striking use of political-economy concepts to understand both broad macroeconomic strategy and its effects in developing countries. The method of this analysis, rather than the analysis itself, serves as a useful inspiration to other assessments of the process of development, which look towards political economy and class configurations in order to understand both economic policies and their effects. This is in sharp contrast to the purely 'technocratic'

² In India, for example, K.N. Raj (1973) attempted an application of his theory to analysing the pattern of import-substituting mixed economy industrialization undertaken by the Indian state, although this was severely criticized by many, *inter alia* Nambodiripad (1973).

assessments that are currently so popular, which abstract completely from the basic politics of development or view it only in terms of rather limited 'interest groups'.

It is apparent that Kalecki's contributions to the economics of development covered a very wide range and also provided insights that remain acute and immensely valuable several decades after he wrote. While many of his conclusions can still be usefully applied to understanding economic processes in developing countries, it may be that the true value of his contribution extends beyond specific arguments. Kalecki's approach combined analytical rigour with a sense of historical specificity, awareness of political and social constraints, and acceptance of the complexity of the interaction between policies and socio-economic processes. And this is really what contemporary economists have to incorporate, if development economics itself is to be regenerated.

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PART III

ISSUES IN DEVELOPMENT

26. The agrarian question and trajectories of economic transformation: a perspective from the South

Sam Moyo, Praveen Jha and Paris Yeros

INTRODUCTION

The agrarian question is a permanent question at the heart of capitalism. This is the first economic system that turned radically against the countryside, its human population and its biodiversity. It is also the first system that created a polarized world, stitched together in an international division of labour and a racialized system of domination, in which the centres have fed off the peripheries in consecutive rounds of primitive accumulation. The contradictions of this obsolete system are not reducible to a pure conflict between abstract capital and labour, but inhere in a deep organic conflict between capitalism, today in its monopoly-finance form, and the degraded peasantries of the world, now in a semi-proletarianized state, which constitute as much as half of the world's population, resident mainly in the countries of the South.

There are many myths regarding what the agrarian question is and how it should be, or has been, resolved. Historically, the classic myth revolves mainly around tales of industrialization as a means to resolve the agrarian question. But the agrarian question is something much more profound: it is a question of national sovereignty, of breaking free of the imperialism of the monopolies and of rebalancing the relationship between North and South, and town and country, so that a sustainable future can be envisioned.

The conventional wisdom which ties the agrarian question (henceforth: AQ) primarily to industrialization is fundamentally misleading. Such a narrow rendering of AQ is typical of Eurocentric or economic incarnations which have treated industrialization as the primordial function of agrarian transition, and are in keeping with the resumed narrative which occludes the imperialist roots of the structural transformation of present-day advanced countries. This, apart from being guilty of neglecting the national and the peasant questions, is factually misleading at least on two counts: it obfuscates the role of colonialism and posits false claims about an endogenous source of the so-called 'agrarian revolution' in explaining the industrial revolution. The powerful influence of this tradition, even among Marxist intellectuals, has contributed to the dogmatic belief that today's peripheries can emulate the path of economic transformation of nineteenth-century Europe by associating their development, including industrial transformation, to monopoly capitalism.

We believe that the AQ will continue to be one of the most fundamental questions of the twenty-first century. Indeed, this is the century in which nature, the current system of world agriculture and historical capitalism are reaching their reproductive limits. The agrarian question today is a question of wresting global agriculture, land and other natural resources from the predatory logic of monopoly-finance capital, and of

submitting them to the logic of autonomous, egalitarian, democratic, industrial and sustainable development, for the benefit of all the peoples of the world. Experience shows that neglecting to address the AQ beyond the narrow confines of industrialization by any means has not only failed to address the contradictions confronting the vast majority of humanity in the global South, but also exacerbated contradictions. These include questions of food self-sufficiency, ecological sustainability, and the viable use of energy for the well-being of the peoples of the South.

While the recent food-price spike and the ensuing food crisis have forced an acknowledgement of the looming crisis, the direction of resolution remains highly contested terrain. Big capital backed by imperialist states is pushing for capital-intensive methods and accelerated exploitation of natural resources in the South, based upon a renewed wave of land alienation from the peasantry. This will only escalate social deprivation and environmental destruction, and lead to the escalation of resource-based conflicts. Developing an alternative is now an imperative, if a sustainable and equitable economic order is to be built.

There is an urgent need to think creatively about alternatives in development and, indeed, rethink the fundamentals of modernity if we are to save it from its own barbarism. What we cannot do is blind ourselves with established conventions, create myths about the past and illusions regarding the future.

This chapter addresses this question by tracing the evolution of the agrarian question, in particular by taking issue with the dominant wisdom which has remained largely trapped in industrialization discourse.* We thus trace the trajectory of the industrialization myth before clarifying the nature of the classical agrarian question and suggesting how it remains relevant in the twenty-first century.

THE MAKING OF CLASSICAL MYTH

The notion of an 'agrarian question' became central to Marxian political economy in the late nineteenth century. Terry Byres (1991a, 9) has argued that '[t]hree distinct senses of the agrarian question may be distinguished: (a) the Engels sense, (b) the Kautsky–Lenin sense, and (c) the Preobrazhensky sense'. In this rendering, each of the three senses referred to the political, social and economic dimensions of backwardness, respectively. Yet, they also converged in their underlying concern with obtaining, whether by capitalist or socialist means, the modern industrialized outcome that England had obtained earlier, ahead of her great power rivals.

* This chapter draws substantially on our recently published piece 'The Classical Agrarian Question: Myth, Reality and the Relevance Today' (Moyo et al. 2013). We wish to thank Utsa Patnaik and Jayati Ghosh for comments on an earlier draft. We also wish to thank the participants of the Annual Agrarian Summer School, organized by the African Institute for Agrarian Studies (AIAS), where many of these ideas have germinated, as well as the participants of the Study Circle on the Agrarian Question (CEQA) at PUC Minas, Belo Horizonte, Brazil, where these ideas have also been discussed. We have presented our arguments at a number of seminars in the last couple of years, the most recent being a conference on the Agrarian Question in the Global South on 15–16 July 2013, at the Jawaharlal Nehru University (JNU), New Delhi. We are indeed grateful to all the participants for showing keen interest in our work. Towards the preparation of this chapter, we would also like to acknowledge the help of Roshan Kishore, a research scholar at JNU. The usual disclaimers apply.

After World War II, as decolonization gained momentum, the theme of backwardness/industrialization gained new life and evolved in different directions, either towards a radical reinterpretation or a conservative rendition, which, more often than not, reduced industrialization to a technocratic exercise and accentuated Eurocentric distortions. At the crux of the matter were completely different realities of the erstwhile colonies compared to their colonial masters which had been the theatre of theoretical debates so far.

In its most conservative rendering, backwardness was posited as a quality innate to non-European societies and industrialization as an end in itself, as articulated in the discipline of 'development economics' by the likes of W.W. Rostow and Arthur Lewis in terms of 'stages of growth' and 'dual economies', respectively. A Marxian discourse of Soviet vintage ran parallel, to propound a 'stage' theory of its own, based on the thesis of a stagnant 'imperialist-feudal' alliance in the non-European world. It recognized land reform as an obstacle, but it would not, for the most part, support radical alternatives, or a peasant path, until the Chinese divergence. Meanwhile, 'Western Marxism', to use Perry Anderson's (1976) term, drifted away from political economy towards philosophy, as disenchantment and social democracy set in.

There also emerged a new generation of theorists, more organic to the peasant struggles of the Third World, to explain backwardness as a dynamic process intrinsic to imperialism, and industrialization as an aspect of a larger strategic objective of fulfilling the aspirations of national liberation struggles. Knocking down obstacles such as powerful land monopolies by mobilizing the peasantry was naturally seen as necessary to unlocking energies of national liberation.

While the Sino-Soviet split of the 1960s had a powerful influence over a new generation of Marxists in the West, the North-South dialogue remained problematic, if not superficial. And even though Marxists in the West returned to political economy, intellectual thought on the AQ became ever more professionalized and confined to the halls of academia. A glaring example of political self-absorption can be seen in the attempts by Marxist scholars in Europe, including the Soviet Union, to dismiss the importance of land reforms for not meeting their high socialist standards.

The collision course between Eurocentric Marxism and the realities of the AQ persisted into the 1990s, in all too similar a fashion as that of the 'two lefts' of the previous period (Moyo and Yeros 2007a). The spectacular wreck finally occurred at the millennium, over the onset of radical land reform in Zimbabwe, the most important land reform after the Cold War.¹ Meanwhile, critical intellectual thought in the South had also suffered setbacks through the gradual erosion of academic sovereignty, due to structural adjustment policies and neoliberal reversals. As state funding dried up, research became dependent on 'project funding', firmly tethering academic work to the likes and dislikes of international capital instead of socio-political realities.

¹ It is notable that the specialized journals, such as the new *Journal of Agrarian Change* (JAC) and the more established *Journal of Peasant Studies* (JPS), either turned a blind eye (the JPS responded a decade after the event) or disparaged the Zimbabwe question from the start (in the case of the JAC, which devoted its inaugural special issue to this). It is also notable that the JAC, in a subsequent special issue (Byres 2004; Bernstein 2004), turned its aim against liberal advocates of land reform, instead of engaging with rural movements or associated Marxists, all now being roundly dismissed as 'populists'.

The rise of a Eurocentric orthodoxy once again reinforced industrialization as the be-all and end-all of the AQ in the South. This is evident even in the works of renowned scholars such as Terry Byres (1991b, 12), in which industrialization was defined once again as the benchmark of 'resolved' agrarian questions, regardless of the fate of the countryside:

[i]f . . . the agrarian question is so resolved [in this case, on the basis of peasant production, but not exclusively] in such a way that capitalist industrialization is permitted to proceed, then, as the social transformation comes to be dominated by industry and by the urban bourgeoisie, there ceases to be an agrarian question with any serious implications. There is no longer an agrarian question in any substantive sense.

Without prejudice to the rich contributions of Marxist scholars, including Byres, on the diversity of AQ in the South, two important problems arise from linking the AQ to the backwardness/industrialization axiom: it 'exports' the AQ from the North to the South, which must carry the burden of transition alone; and makes industrial transition a banal question, abstracted from its relations with monopoly capital, militarism and its social, political and environmental consequences.

Such historic generalizations have been contested in the literature, highlighting the historic role of global primitive accumulation in the transition to industrial capitalism and arguing that the original English and European paths of industrialization were neither an endogenous affair (Williams 1994 [1944]; Rodney 1972; Amin 1976), nor did they entail an 'agricultural revolution' in Europe (Patnaik 2006). It was the operation of colonialism through its various instruments of rule, and not some benign resolution of the AQ, that propelled and sustained the 'transformation' in these countries. This relationship would not rupture after decolonization and in fact would re-intensify under neoliberalism (Patnaik 2012). We must conclude that the agrarian question of advanced capitalism has never been resolved in its global dimension: economic progress has been as congenital an ailment as economic backwardness.

The gravest consequence of connecting the AQ exclusively to backwardness has been the displacement of the debate over politics and policy from North to South, absolving the North of any transformative obligation, other than providing 'aid' to the South, or removing subsidies to help the poor 'compete'. Such a line of thinking permeates both left and right, with few exceptions.² As for the banalization of industrialization, even the early European thinkers who converged around this objective had divergent views on how to obtain it, and differences were stark: there were advocates of capitalist or socialist industrialization, fast or slow, light or heavy, balanced or unbalanced, violent or non-violent. Today, there is great effort to affirm one tendency, the economistic.³

² The most notable exception is arguably the *Monthly Review* School. Lest we be accused of exaggeration, one need only browse the four decades of cumulative publications in the specialized journals, *JPS* and *JAC*, to note that hardly any sustained thought, and certainly no special issue, has ever been devoted to the agrarian question in the contemporary North Atlantic. Over the course of 40 years, just half a dozen articles have been published on the matter.

³ One might again protest, pointing to the recent attempt by Henry Bernstein (2010a) to marry 'political economy' with 'political ecology' as an intellectual project. But without genuine recognition of the silences and evasions of the past, this project is likely to flounder, as indeed it appears to have done in a book published simultaneously on 'the class dynamics of agrarian change' (Bernstein 2010b; Yeros 2012).

To summarize, the Eurocentric orthodoxy has pushed to the backburner the analysis of colonialism's legacy and reduced the 'development' or 'transformation' question to a mere technocratic or economic exercise. In our judgement, it is such reductionism that has led another respected Marxist scholar, Henry Bernstein, to proclaim and wish away a resolution of the AQ:

with contemporary 'globalization' and the massive development of the productive forces in (advanced) capitalist agriculture, the centrality of the 'classic' agrarian question to industrialization is no longer significant for international capital. In this sense, then, there is *no longer an agrarian question of capital on a world scale*, even when the agrarian question – as a basis of national accumulation and industrialization – has not been resolved in many countries of the 'South'. (Bernstein 2004, 202)

For Bernstein, given the possibility of large capital inflows for the developing countries in the era of contemporary globalization, the classical agrarian question is dead. Such attempts to create a rupture between the so-called agrarian questions of 'capital' and 'labour' for the contemporary South as articulated by Bernstein, namely by arguing that in the agrarian question of capitalist transition the question of 'labour' has been simply subsumed by the question of 'capital' via mobility of international capital in the era of globalization, is nothing but an attempt to force the hegemony of unilinear economic transformation devoid of the historical setting in which it was achieved in the West. Yet, steadily escalating land grabs and other forms of primitive accumulation through destruction of petty production in the South throughout the neoliberal period (Moyo 2008; Moyo et al. 2012) demonstrate that capital accumulation, whether linked to contemporary Western finance or Chinese industry, remains closely integrated with agriculture. The above exposes the impropriety and vacuousness of theoretical justifications for forcing vanguardist European traditions on 'agrarian studies' in dealing with the contradictions of the global South.⁴

WHEN AND WHAT WAS THE CLASSICAL AGRARIAN QUESTION?

The classical AQ can be divided into two historical questions, those of industrialization and national liberation. For the vanguardist traditions in Europe, the latter question was secondary, if at all pertinent, and the debate essentially boiled down to marshalling the resources necessary for the industrialization effort through capitalist or socialist means. In contrast, for the newly independent countries in the Third World, national liberation was a far more important issue, rooted in the wide ranging political and socio-economic aspirations associated with anti-colonial struggles, starkly different from the realities of the European colonisers. The changing character of imperialism, from that of direct colonial occupation to being directed at squeezing economic sovereignty through finance capital or military intervention when required, contributed to a further complication of the issue at hand, making a replication of European vanguardist traditions not just

⁴ For an elaboration of this argument see Moyo et al. (2013).

difficult but inimical to the very objective of national liberation. Also, the predatory effects of capitalist development on the environment, regional imbalances, even within the global South, and questions of disparities within the peasantry and working class, including race, caste and gender inequalities and forms of repression, found themselves unaddressed.

The foregoing discussion does not imply discarding the rich evolution of the AQ in history. Instead, it redraws the boundaries of the AQ, against a mechanical, ahistorical application of the understanding the debate. In fact, the history of AQ has followed a dialectical process where the erstwhile understanding has been put to the test vis-à-vis existing socio-economic realities and necessary political praxis. We can trace the evolution of the classical AQ across its two main historical phases, those of industrialization and national liberation, stretching from Engels, Kautsky and Lenin to Mao, Fanon and Cabral. The key difference between the two sets of questions is that the latter, of national liberation, articulated with unprecedented clarity and conviction the requirement of sovereign industrialization, or the safeguarding of the capacity to determine one's own external relations and internal balances. It also aligned, for the first time, the agrarian question with its most obvious political subject of national liberation, the peasantries of the peripheries of the system. Yet, it is important to stress that every new step in this long evolution did not entail an outright rejection of the former by the latter, but an ingenious application of the prevailing understanding to the needs of attaining the goals of both industrialization and national liberation in societies which were very different.⁵

To appreciate the significance of this evolution we should recall that Marx himself had little sympathy for the European peasantries and an even lesser regard for the peoples of the South who were 'without history' of their own. One may quibble about his later doubts about the necessity of the capitalist path on the road to socialism, but the analysis and verdict that weighed heavily over a whole generation of European vanguard intellectuals was that European capitalism was a necessary advance over other peoples and modes of production. Engels's own verdict was a hard line until the end, despite his own deeper analytical appreciation of the dynamics of social differentiation in the countryside. Even Kautsky, who took this analysis to a new level of sophistication by recognizing an ambiguity in the systemic reproduction of a semi-proletarianized peasantry under capitalism, could not overcome a disparaging view of the peasantry. To all the above, modernity required an industrial transition and the transformation of peasants into workers as a means of claiming their place in the modern world.

The first break in this tradition occurred with Lenin, who, despite sharing with Kautsky a similar understanding of semi-proletarianization, unambiguously proclaimed 'the struggle for land' by the poor peasantry to be the basis of a rural-urban alliance under the leadership of the proletariat. He also recognized the importance of national self-determination in the struggle against imperialism. Yet, even in this case, there was little in the way of an organizational strategy for the countryside and, more obviously, of the peripheries, or of questioning the leadership role of the industrial proletariat. A further break in this tradition occurred in the aftermath of the Bolshevik Revolution, in the heated disputes over industrialization, which essentially pitted Preobrazhensky

⁵ For an elaboration of this argument, see Moyo et al. (2013).

against Chayanov. Neither prevailed over Stalin, but the importance of Chayanov in particular lies in his quest to engage intellectually with the peasantry, the mass of the Soviet population, and seek an alternative modernity in the countryside. But with Chayanov, the European vanguard reached its limits.

The culmination of the classical agrarian question was to occur in the ensuing years, in the hands of Mao and the Chinese Communist Party (CCP), and in the liberation struggles in Asia and Africa. The CCP not only elaborated a complex dynamic of social differentiation, but submitted it to the overarching political question pertaining to a 'semi-colonial' country, the 'national revolution', against the landlords and comprador classes allied to imperialism. Rising above the prejudices of inherited conventions, all the remaining segments of society need to be understood – the petty bourgeoisie, the peasantry, the semi-proletariat, the proletariat, the lumpenproletariat – and their revolutionary potential identified. In theory, the proletariat continued to be identified as the revolutionary agent, but in practice, the national revolution would stand or fall on the ability of the CCP to organize the main victims of primitive accumulation. On this basis, the Chinese revolution proceeded to introduce new and higher forms of co-operativism in the countryside and an industrialization project which was both sovereign and favourable to the peasantry. To this day, these remain the hallmarks of an alternative modernity which will have to be re-examined and heeded, as the world capitalism system teeters on the brink of catastrophic scenarios in the twenty-first century.

The AQ of national liberation reached its fullest expression in the final contributions made by Frantz Fanon and Amílcar Cabral. It is in their hands that the peasantry was explicitly acknowledged as the revolutionary agent, not only in practice but also in theory. This is because the peasantry, as the most destitute class, the 'wretched of the earth', has nothing to lose and everything to gain. Moreover, the national revolution became most clearly articulated as a process of self-becoming of a people denied of history by colonial rule and racial doctrine. The national revolution thus became an ideological struggle which was both larger than and inseparable from political and economic sovereignty. It is through national struggle that the peasantry was seen to attain universality as a people among peoples, with a past and a future, irreducible to this or that class category. In these final contributions, the agrarian question become fully consonant with the national question and the victims of primitive accumulation fully human, thereby closing the circle which began with imperialist partition and ideological dominance.

Today, the ensuing consolidation of monopoly-finance capital and the new scramble for monopoly control over the planet's natural resources and agricultural land have constituted a concerted attempt to reverse the gains of national liberation (Foster 2010; Moyo et al. 2012). The challenge in the current phase is thus qualitatively different: the key issue is no longer the conquest of political sovereignty in a generalized sense, although colonial questions do persist and are even expanding (Moyo and Yeros 2011), but the defence and deepening of the already conquered sovereignty regime. For very concrete reasons – the reality of millions of peasants in each country of the global South, who can neither be shipped to the 'New World' nor get employed in factories – this question cannot be resolved by either proclaiming the agrarian question as dead or wishing away the peasantry.

THE SPECTRE OF THE AQ AT THE CURRENT JUNCTURE

Any attempt to defend the conquests of the past and to project into the future must involve an appreciation of the long duration of agrarian transition – that is, the organic transformations in economic structure, class formation and integration in the world economy – the new dynamics of land alienation and resistance, and the role of small producers in national development. These are the concrete issues with which all dimensions of the agrarian question must contend, including race, caste, gender, ecology and regional integration. We emphasize this, for there are many other ways of looking at these latter dimensions but with no clear sense of the objective historical constraints and possibilities, no appreciation of the dialectic of primitive accumulation and popular struggle, and much contempt for the peasantries of the world.

One such perspective is, of course, that of monopoly-finance capital, which in its public discourse is full of praise for progressive gender and race relations and all human rights, and full of solutions for all pressing issues, from food security to our ecological dead end. It is once again leading the new scramble for land and natural resources, especially in Africa, followed by private and state companies from the East and South. We have noted the dynamics of this new scramble in a recent statement, and need not extend the argument for now (Moyo et al. 2012). It is essentially the consequence of an insurmountable crisis of capitalism, which has once again escalated its primitive accumulation on new terms. Suffice it to note that the scramble is different from prior scrambles, as much in its hyper-speculative logic as in the incorporation of non-Western participants, but also in the unprecedented potential of resistance and manoeuvre inherent in the contemporary post-colonial world economy of formally sovereign states.

Insofar as the scramble is concerned, its main thrust is to establish large-scale farming and extractive enclaves for the export of food, biofuels, minerals and energy resources by means of production chains integrated into foreign monopolies. In the case of the United States (US)-led Western alliance, this project is bolstered by the militarization of all corners of the planet, none of which bodes well for progressive causes of any kind. Indeed, it would be no exaggeration to say that the US-led scramble is placing genocide back on the agenda in the twenty-first century.

There is another perspective which deserves mention, quite apart from the trends of resistance. Prior to the major land grabs, there were also those who took interest in historical transitions, to construe the low-profile land alienations carried out under the aegis of neoliberal policies as possibly the final blow, leading to the ‘disappearing peasantries’ (Byceson et al. 2000; Graziano da Silva 1999). It amounted to a narrow notion of transition, springing from an implicit (if not also explicit) desire for a post-peasant world which appeared to be on the horizon, on account of structural adjustment, outmigration and, especially, the flowering of multi-occupational survival strategies. The analysis was linked to a new set of reformist and welfarist policies to be undertaken by the development industry, namely support for the ‘livelihood strategies’ of the dispossessed (what Bernstein called ‘the agrarian question of labour’) and the technical upgrading and market integration of the remaining farmers (Graziano da Silva and Tavares 2008).

With the onset of major land grabbing, such thinking could only take flight in a moralistic discourse and an empiricist vocation, without a clear perspective on what is at stake. To this day, neither imperialism nor sovereignty has become relevant enough a category,

to the mainstream of most agrarian studies, around which to reorganize the discussion on the agrarian question. Indeed, how can one defend the national question after having wished away the inhabitants of whole nations?

The multi-occupational deepening of the last 30 years – which we have called ‘semi-proletarianization’ – has been neither a new, nor a linear phenomenon. Even in Africa, in the non-settler regions where land dispossession was never extensive and peasant societies remain predominant, ‘virtually all small producers practiced more than subsistence production’, as the late Archie Mafeje noted (2003, 15). Moreover, semi-proletarianization has never gone without a fight. Indeed, so-called ‘de-peasantization’ has produced a new wave of land occupation movements across the South, this being one of the most important political facts of our times (Moyo 2001; Moyo and Yeros 2005). The land movement in Zimbabwe may have been the most successful in reclaiming land, but the depth of the political work that has been under way on all continents has set the stage for consideration of ‘re-peasantization’ as a modern, sovereign project in the twenty-first century.

The forces arrayed against such a project are certainly enormous. But there are counter-forces at play, arising especially from small countries such as Zimbabwe, Venezuela, Cuba, Bolivia, Ecuador and Nepal, which weathered crisis and radicalization to bring back the national question to the development agenda (Moyo and Yeros 2007b, 2011, 2012). It is no coincidence that the idea of a ‘return to the countryside’ has been most clearly expressed in these countries, uniquely in every case. A further counter-force may yet emerge from the large semi-peripheral countries, namely China, India, Brazil and South Africa. They have persisted in a contradictory systemic function, even in the recent period of ‘emergence’, and are now sliding into crisis as their internal and external contradictions intensify. But, depending on the relation of forces within and around them, they do have the potential to drive a wedge into the workings of monopoly capitalism (Moyo et al. 2012).

One notable indication of these contradictions is the ‘family farming’ model for food security promoted in Brazil in the 2000s (Graziano da Silva et al. 2011) and subsequently projected into the international arena. It amounts to a ‘middle peasant’ response which, by design, implies a diversion from the land question, but which, given the proactive role that it ascribes to the state, becomes subject to struggle by diverse forces: not only the preponderant green revolutionaries driven by corporate giants and Rockefeller–Gates philanthropy, but also agro-ecologists associated with Via Campesina and radicalized states with a ‘Look East’ policy (Moyo and Yeros 2012).

Contemporary debates over the fate of the peasantry raise familiar historical questions over their socio-economic character and political significance under capitalism (Moyo and Yeros 2005), yet the classical perspective cannot be simply transposed onto present-day conditions in the periphery. To be sure, the peasantry still refers to the small-scale agriculturalists with access to land and family labour, who operate within the generalized system of commodity production and are more directly exposed to ecological degradation. The peasantry does not constitute a class in an undisputed manner, remaining as always subject to the inherently antagonistic tendencies of proletarian and proprietor. It remains differentiated between the rich, middle and poor producers, a spectrum that ranges from the capitalist who employs labour power, beyond the family, to the semi-proletarian who sells it – the middle peasantry being a rare condition. The peasantry also remains differentiated by gender and generation, such that the combination of capital

and labour is not spread evenly within a single household either: patriarchs control the means of production, while women and children provide by and large unwaged labour.

While this may appear on the surface as a 'different' mode of production to this day, petty-commodity production is firmly embedded in the capitalist system and is a normal feature of capitalist society, even if subordinate and unstable. Capitalism maintains the peasantry in a state of flux. While the historical fate of the peasantry in the North Atlantic has been proletarianization, the direction of change is not historically determined. Within the centre-periphery structure spawned by colonialism, proletarianization has coexisted with enduring semi-proletarianization as well as re-peasantization. In the present reality, the resilience of the peasantry through struggle is evidenced by the existence of more than 1 billion small producers in the South, whose main source of household income is derived directly from land, including from non-exchangeable sources of sustenance. Their residential locus is tied to the countryside, including through straddling both town and country. The condition of semi-proletarianization is dynamic, as semi-proletarianized peasants struggle for a living against richer peasants, large-scale commercial farmers and other employers who hire semi-proletarians at wages below the cost of social reproduction.

Rather than fulfilling a secular process of 'primitive accumulation' (which Bryceson 2000, 55 suggests vis-à-vis Africa specifically), neoliberalism has, on the one hand, intensified the process of land alienation and, on the other, increased the demand for land and its natural resources, as a consequence of the generalized decline in sources of income (farm, off-farm and non-farm). Thus, 'the enforced extension of peasant survival strategies under pressure of impoverishment' (Raikes 2000, 68) to such activities as petty trading, craft-making and gold-panning has been accompanied by an intensified struggle to access land in both rural and urban areas, as well as an intensified political struggle to reclaim and protect land. Moreover, rural emigration has not led to full proletarianization or permanent urbanization but to the spreading of risk in highly adverse circumstances, given that urbanization has been accompanied with de-industrialization and retrenchments. It is notable that retrenched workers from mines and farms are known to pursue peasantization, as do urbanites who enter the land-reform process (Moyo and Yeros 2005). Re-peasantization occurs both independently and through official land reform programmes, as Zimbabwe has shown. Lauro Mattei (2005), for example, has shown that in Brazil during the 1990s, 450 000 peasant properties disappeared, while 270 000 families were being settled by land reform; in other words, for every three peasant families dispossessed of land, two gained land. Full proletarianization has generally been forestalled in Asia, not least by state action, and because rural households, by and large, have held onto a plot of land and maintained the dual-income strategy of petty-commodity production and wage labour (Harriss 1992; Breman 2000). Meanwhile, rural non-agricultural activities and markets have proliferated, such that between 30 and 40 per cent of household incomes are now derived from off-farm sources (see the overview in Mooij 2000, 222), meaning that the dual trend of ruralization of the city and urbanization of the country is also observed in Asia. '[T]he informal sector [in the urban economy] is not a stepping stone towards a better and settled urban life, but a temporary abode for labour which can be pushed back to its place of origin when no longer needed' (Breman 2000, 241).

Since there is no New World in which to settle, as there had been for the proletarianized masses from Europe a century earlier (Breman 2000, 240), contemporary agrarian change

has to be relocated to its proper centre-periphery context. The transition to capitalism in the periphery has taken place under disarticulated accumulation and has been subordinated to not only the accumulation needs of domestic bourgeoisies but also the dominant accumulation needs of monopoly capital. Consequently, it has not been characterized by an 'American path', as identified by Lenin – that is, a broad-based accumulation by petty-commodity producers 'from below' – but by a variety of paths.

A dominant 'junker path' of landlords-turned-capitalists persists in Latin America, while a comparable phenomenon also persists in Asia (outside East Asia) with different dimensions, together with another variant in some white-settler societies of Southern Africa, having matured during the twentieth century and followed the green revolution. In economic and political terms, this path of large-scale commercial farming now operates in tandem with monopoly capital (whether land-owning or not), including the combining of large agrarian capital with providing 'ecological services' (for example, climate change and ecotourism ventures). A 'state path' involving large-scale farming on land appropriated by states in the course of nation-building is present throughout the periphery, but has been in reversal by privatizations, and concessions to national and international capital, feeding directly into the junker path and other forms of capitalist farming.

A 'merchant path' of non-rural capital, including merchant capital, petty-bourgeois elements, bureaucrats, military personnel and professionals who have gained access to land, whether leasehold or freehold, via the state, the market or land reform, has also emerged in the periphery. They farm on a smaller scale than the junkers, but they are properly integrated into export markets and global agro-industry. Alongside this path is a limited 'middle-to-rich peasant path' of commodity producers created by a combination of generic tendencies to rural differentiation and active state policies in the postwar period. During nation-building, this stratum was subject to contradictory policies of low producer prices, subsidy and land reform. Under neoliberalism it has been augmented by parcelization and decollectivization, and operates in a variety of tenurial arrangements, including freehold and communal. Forced to survive on their own under liberalization, these producers have also diversified investments to off-farm activities, while increasingly being tied to monopoly capital through contract farming. Capital directly controls their conditions of production without taking the title of the land or becoming embroiled in labour issues.

Finally, a 'rural poor path' is the most extensive and includes the masses of fully proletarianized and semi-proletarianized peasants, characterized by the contradictory tendencies of full proletarianization and retention or acquisition of a family plot for petty-commodity production and social security (consistent with functional dualism). This rural proletariat and semi-proletariat migrates within rural areas, from rural areas to urban centres, and across international boundaries; and it enters the informal economic sector in both rural and urban areas, while struggling for re-peasantization, sometimes successfully. Under liberalization, this path has been expanded by retrenched workers and the wider underclass of the displaced, insecurely employed and unemployed.

Agrarian change in the periphery is further configured by social hierarchies which derive from gender, generation, race, caste and ethnicity. In some cases, these have intensified to such a degree as to produce forms of 'personal dependence' that may properly be called 'human bondage' under capitalism. Such 'non-capitalist' phenomena were noticed by the vanguardist European theorists, but generally the propensity of

capitalism to re-create such phenomena in the longer term has been underestimated. In the contemporary world, disarticulated accumulation and its corollary of semi-proletarianization provide the structural economic basis for the flourishing of such phenomena. These apparently 'non-capitalist' phenomena are fully contingent on the operation of the capitalist market, thereby further highlighting the unresolved national and agrarian questions in the periphery. In this context, a socially progressive 'peasant path' requires critical consideration, not least via land reform to serve the growing demand for land by popular movements.

It is thus notable that the concern with redefining development in the twenty-first century and reconsideration of the peasant path has returned with conviction to the agenda of the research community, especially in the South. Well prior to the major land grabs, in the late 1990s, researchers were challenged by the upsurge in land occupations and onset of radicalization to think through the new possibilities. Debates in Africa, occurring within the Council for the Development of Social Science Research in Africa (CODESRIA), had the effect of placing a new land and peasant question on the research agenda, in settler and non-settler Africa alike, together with a new interest in long transitions (Moyo 1995, 2000, 2008; Mamdani 1996; Mafeje 2003). The debate synergized with like-minded debates among major South–South research networks, including the Dakar-based Third World Forum, the Latin American Council for the Social Sciences (CLASCO) and the Delhi-based International Development Economics Associates (IDEAS), to promote an alternative agenda across the South, one which appreciates the merits of a peasant path to development.⁶ When the global land grabs escalated in 2007–2008, one could indeed speak of an identifiable and convergent Southern perspective on the nature and future of the agrarian question.⁷

The deepening global crisis ahead will certainly require a more attentive analysis of not only land grabs but also diverse struggles towards re-peasantization. It will also require an appreciation of the long-term sovereignty-enhancing effects of historic peasant paths in the South, especially the Chinese. However, we should not expect, nor endeavour to emulate, a 'model' peasant path, but recognize the multiplicity of peasant paths that are struggling to establish their hegemony in specific national political processes. The case of Zimbabwe is again an important example, which has combined a new peasant path with a persisting small-scale agrarian capitalist element and even a remaining small junker class. In this case, the balance of forces has changed by means of radical land reform and has profoundly bolstered national sovereignty, as expected. But, as elsewhere, the political struggle is set to continue.

In many other cases, the balance of forces has yet to change, or is leaning ever more towards corporate farming. One of the major tendencies in Africa, which has taken hold over the course of structural adjustment and now the land grabs, is a new conflict over peasant, small-scale capitalist and large-scale corporate farming. This is a conflict which will mark the terrain of political struggle over the next generation. We must take

⁶ See Moyo (1997, 2000, 2008), Moyo and Romadhane (2002), Jha (2002), Jha et al. (2007), Jha et al. (2010), Moyo and Yeros (2005, 2011), Amanor and Moyo (2008), Tsikata (2009), Shivji (2009), Tsikata and Golah (2010), Rosa (2011) and Moyo et al. (forthcoming).

⁷ See Patnaik and Moyo (2011), Amin (2012), Ghosh (2012), Patnaik (2012), Moyo et al. (2012) and Kamata (2012).

note of, and not wish away, the new peasant struggles in the continent, which whether well organized or not, continue to emerge and even influence the public policies of states concerned with food security, even as the latter make schizophrenic concessions to monopoly capital.

In Latin America, the balance of forces continues to tilt against the peasantry, as in Africa, but in this case too, peasant struggles have not subsided. On the contrary, they have gained strong organizational bases and have even articulated an 'agro-ecological' counter-model to corporate agriculture. Struggles for land have maintained land reform on the agenda, even if they have not changed the balance of forces, as in Brazil. Meanwhile, new initiatives for re-peasantization have been launched by the vanguard states, especially Cuba, and constitutional reforms have sought to strengthen the political power of peasant and indigenous peoples, as in Bolivia.

In the North Atlantic centres of capitalism we may also expect organic tendencies towards a return to the countryside and struggles against corporate agriculture, as the crisis deepens. If we care to look closely, the history of capitalism is, in fact, dotted with variegated experiences of 'return to the countryside' in periods of general crisis, not least if we count among these the export of populations to the New World. There is no reason to expect that the current, terminal crisis of monopoly capitalism will escape the spectre of a brand new, twenty-first-century agrarian question in the old centres of the system. Perhaps a Southern perspective will even be sought to rejuvenate thinking outside the 'classical' box.

In all cases, finally, we must look closely to the rural-urban connection, which is most expressive in the semi-proletarianized periphery, but is also intrinsic to any 'return to the countryside'. At least for the periphery we know full well, by the emerging dynamics of the political process itself, that there are material issues fundamental to both town and country which are capable of uniting them politically, in wholly new ways. The land question is one of the most important of these issues, together with the race/caste and gender questions, and we may expect this to be increasingly a point of convergence. We may also expect, and indeed strive for, the ideological constitution of the land question as a question of the dispossessed under a really existing capitalism that in fact owes its long life not merely to expanded reproduction in industry, but also to permanent primitive accumulation against the wretched of the earth.

CONCLUDING REMARKS

It is remarkable indeed that the grand narrative of the 'classical' agrarian question has not only been kept alive in academic discourses (instead of being accorded a decent burial), but gets pushed aggressively in policy establishments, both nationally and internationally, across the globe. Much of it is driven by the agenda of monopoly-finance capital, of course in the name of 'development', and supported by powerful institutions such as the World Bank and other formidable forces. What it ultimately stands for is a push towards a 'global-corporate-capitalism' in agriculture through subjugation as well as marginalization of the peasantry. All it does is to keep bloating the size of, to use Marx's phrase, the 'relative surplus population'. We may recall that Marx had made the distinction between the different components of the 'relative surplus population', categorizing them as the

floating (those who are sucked in and out of the capitalist production process as per its requirement), the latent (those not fully integrated in the circuit of capital) and the stagnant (those who constitute the almost unemployable).

The last of these are at the bottom of the economic and social hierarchy, and many among them – ‘vagabonds, criminals, prostitutes’, often malnourished, elderly and so on – constitute more or less a class of ‘dangerous’ paupers. In other words, this third segment or the ‘lowest sediment’ effectively consists of, to quote Marx:

the demoralized and the ragged, and those unable to work, chiefly people who succumb to their incapacity for adaptation, due to the division of labour, people who have passed the normal age of the labourers; the victims of industry, whose number increases with the increase of dangerous machinery, of mines, chemical works, etc., the mutilated, the sickly, the widows etc. (Marx 1976, Ch. 25)

Further, as Marx puts it:

pauperism is the hospital of the active labour-army and the dead weight of the industrial reserve army. Its production is included in that of the relative surplus population, its necessity in theirs; along with the surplus population, pauperism forms a condition of capitalist production, and of the capitalist development of wealth. It enters into the *faux frais* of capitalist production; but capital knows how to throw these, for the most part from its own shoulders on to those of the working class and the lower middle class. (ibid.)

We would like to suggest that the stagnant component of Marx’s category tends to rise disproportionately in the era of the neoliberal economic regime, when monopoly capital has a decisive stranglehold.

Any agenda of progressive economic transformation must challenge the pauperization and decimation of the peasantry and must not only address the protection of peasant production but also nurture it, within a framework of national sovereignty. However, it must be emphasized that we are not romanticizing the resilience of petty production or any ‘idealized’ peasant path. Capitalism, left to its own spontaneous mechanisms, is, of course, all about relentless class differentiation. Our argument is that there is no compelling reason to take the spontaneity of capitalism as cast in stone.

Furthermore, if peasant production is to have any chance, co-operative and collective forms to nurture it must be made a matter of priority. In other words, both technological and organizational upgrading of peasant-based agricultural production have to be addressed. This should also go hand in hand with a broad-based programme of industrialization which is primarily connected with the expansion of the home market. We must reiterate here that such an agenda of economic transformation without the strengthening of the nation-state will remain a mere illusion.

By way of summing up, it is our view that the debate regarding a new agrarian question based on a peasant path has been once again pried open. And there is growing recognition of its basic elements, namely that:

- The peasantry is a force which has remained untested as an agent of development in most places in the South, despite the historic failure of other agents.
- The peasant path does not necessarily imply the unleashing of a new round of

social differentiation and land alienation, which may be regulated by state support and protection of markets and tenure, especially against the co-optation strategies of corporate monopolies.

- Co-operativism remains an important method for overcoming the shortcomings of peasant production, in terms of scale and position against monopolistic markets, while enhancing its many unique advantages in terms of labour absorption, versatility in production, low energy requirements, regard for ecological balance and popular participation.
- The peasant path does not imply the abandonment of industrialization, which may have unique starting-points in every case, not least external to agriculture, but which must serve the technical upgrading of agriculture and co-operative enterprise and the attainment of food sovereignty on the national and regional levels.
- Gender equity and ecological sustainability are fundamental to the success of the peasant path and its associated industrialization, both in the process of political mobilization and in the co-operative organization of production and reproduction.
- The land question is separate from, but overlapping with, the peasant and agrarian questions, insofar as land has reproductive functions for diverse communities, whether urban or rural, 'indigenous' or otherwise, quite apart from production.

Should movement in this direction gain force, as it is likely to do in the deepening crisis ahead, it will be consonant with the requirements of historic advance on an autonomous, democratic, equitable and sustainable basis, and a vindication of the liberation struggles which first pried open the political space for such a historic advance.

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27. The effective demand approach to economic development

Jan A. Kregel

INTRODUCTION

From Antonio Serra (2011 [1613]) to the Mercantilists to the Physiocrats to the Classical economists (see Kregel 2004; Jomo and Reinert 2005), the objective of economic analysis was the formulation of policies to further what Adam Smith (1937 [1776]) called the ‘wealth of nations’ or what we would now call the economic development of the nation. This tradition was carried into the twentieth century by Schumpeter’s (1961 [1912]) *Theory of Economic Development*.

However, the increasing dominance of neoclassical economics shifted economists’ attention to the identification of the conditions necessary to assure the optimal utilization of the given resources available to each individual via exchange at market prices to produce maximum individual utility. The behaviour of the overall economic system became a simple consequence of individuals’ utility-maximizing actions in free markets, and direct policy discussion of measures to ensure that they produced development became unnecessary. Indeed, the means to the end of maximum economic welfare, the efficient operation of free markets, became the very objective of economic policy as governments were encouraged to drop policies to harness the operation of markets to aid in the development process, and instead to adopt policies to allow free markets to determine development strategy. In the twentieth century these differences came to be represented by the contrast between development economists who believed that the motive force for economic development was to be found on the demand side, and those who believed that development can only be supported by lifting constraints on the supply side. While most modern development theory continues to be based on the supply-side approach, this chapter seeks to recover the importance of the demand side.

THE ORIGINS OF POST-WAR INTEREST IN DEVELOPMENT: ECONOMIC FRAGMENTATION

Modern interest in economic development emerged after the First World I in the work of Rosenstein-Rodan (1943), motivated by the disruption to integrated economic activities caused by the redesign of national boundaries in the Balkan regions of South-Eastern Europe. The creation of new nation-states from prior empires meant that what had been integrated production and supply relations within political boundaries became external trade relations across newly created national boundaries, and subject to diverse national economic policies. The interest in development was further supported after World War II, when these problems surfaced as a result of the separation of previously

integrated European and Asian colonies into independent economic and political entities. The basic problem to be resolved was how these new national economic units could build domestic production capacities that would replace the prior colonial linkages and allow them to become self-sustaining economic entities that could support rapidly expanding populations.

KEYNES AS THE GUIDE TO POST-WAR DEVELOPMENT ECONOMICS

Simultaneous with this renewal of interest in economic development, Keynes's theory of effective demand was being developed to show how developed economies could make the best of their available resources by promoting policies that pushed aggregate demand to the point of achieving full employment. But the first major policy implementation of Keynes's theory was not to promote government policy to support the level of effective demand required for full employment – that problem was being resolved by the war effort – but rather how to manage the fully employed wartime economy. The manual was Keynes's pamphlet *How to Pay for the War* (1940), rather than the *General Theory* (1936). But both were based on the same general approach and understanding of the operation of the macroeconomy.

Thus when the post-war conditions created the problems of promoting development strategies for the newly created national economies, it was natural to look to Keynes's theory as the basis for the formulation of new theories of development. Although it was evident to the early 'pioneers' of development economics (see Meier and Seers 2001) that there were basic differences in the problems and conditions facing developed and developing economies, they did not reject Keynes's approach to the former problem, but instead sought to adapt it to the needs of developing countries.

For a developed, industrialized economy the problem Keynes sought to resolve was the low level of capacity utilization of existing productive equipment and labour, while the problem facing developing economies was the prior problem of acquiring productive capacity capable of providing income and employment for the population. The prior need to be met was to accumulate capital and then to use it fully and effectively. The basic underlying problem to be resolved was the same: how to provide employment for all those willing and able to work, but who were unable to find it.

In a general sense, the problem of development may thus be seen as finding economically productive activity for an expanding supply of labour, which can be the result of either high fertility rates or the impact of increasing agricultural productivity, which relentlessly creates excess labour in that sector which tends to predominate in early stages of development. It is thus not surprising that a central concept in the application of Keynes's theory to developing economies came from Joan Robinson's (1936) concept of 'disguised unemployment', even though it was primarily formulated to deal with the problem of the appropriate level of demand in an industrialized economy.

In order to meet ambiguities raised concerning the appropriate definition and measurement of full employment to be achieved by Keynesian policy, Robinson proposed that the definition be modified to focus on changes in the level of output. Irrespective of the number or percentage of unemployed workers, she argued that if an increase in

investment could produce an increase in output without reducing the output of consumption goods, then further fiscal stimulus was merited. The economy was only at full capacity and full employment if output could only be increased by shifting resources from one type of production to another. The Indian economist V.K.R.V. Rao (1952) was apparently the first to make use of the concept in the context of development, and was also in all probability responsible for its appearance in a number of early documents on development produced by expert commissions organized by the United Nations (e.g. 1949, 1951).

Although Rao rejected the applicability of Keynes's theory because he believed that the multiplier would be zero in economies with a large proportion of the population employed in subsistence peasant agriculture (an argument also used by Furtado 1963 in the Brazilian context) outside the formal wage system, disguised unemployment could be identified as being present in agriculture if labour could be transferred to employment in manufacturing activities without a reduction in the output of agricultural goods. Thus, an increase in investment in manufacturing capacity could be achieved without a reduction in the consumption of foodstuffs, presenting a *prima facie* case for the existence of underemployment of labour in agriculture. While this idea in the hands of those more familiar with neoclassical concepts became the definition of developing countries as exhibiting a zero marginal product of labour in agriculture (cf. the discussion in Viner 1952), it in no way depended on either the marginal theory or the idea that marginal productivity was zero, although this formulation did generate a great deal of resistance among neoclassical theorists.

THE DEVELOPMENT PIONEERS

As a result of this specification of the conditions facing developing countries, the theories proposed in the 1950s and 1960s by what are now called the development 'pioneers' all focused on the creation of sufficient aggregate demand to allow labour to be absorbed in activities outside agriculture. This was especially evident in the theories of Rosenstein Rodan's 'big push' or Nurkse's 'balanced growth', which sought to generate multiplier synergies across sectors through a coordinated, government-planned investment programme covering the economy as a whole. It was characteristic of these theories that they took as a grounding principle Nurkse's belief that all capital accumulation was the result of domestic-income creation, and advocated strictures to ensure not only that the required investment occurred without reducing consumption, but also that it should increase incomes without increasing consumption (see Nurkse 1953; Kregel 2011). It is characteristic of this approach that it rejected outright the traditional neoclassical approach to development based on the appropriateness of allowing comparative advantage through open trade to select the areas of investment, and minimized any need to fill resource gaps with foreign saving and finance and thus the necessity of opening the economy to attract foreign capital inflows to supplement deficient domestic savings or domestic finance. This is evident, for example, in Nurkse, Singer and others' rejection of the neoclassical view (e.g. Viner 1947) that the return to capital in developing countries would be high because it was in scarce supply, and thus efficient international capital markets would channel it to developing countries; arguing instead that returns would be

low because demand was insufficient to produce the levels of demand required for efficient operation at design capacity to generate economies of scale.

These 'balanced' growth approaches to development were countered by arguments in favour of 'unbalanced' growth, but these theories also relied on the demand generated by the endogenous efforts to offset imbalances that result from the uneven expansion of the development process itself (cf. Hirschman 1958; Streeten 1959). Indeed, Hirschman's concepts of forward and backward linkages are a representation of the way in which an investment generates demand for domestically produced inputs and the need for creation of domestic distribution networks. Both provide an alternative explanation of how the multiplier could generate not only increased income and employment, but also new areas of activity. A similar process is at work in Myrdal's (1957) ideas of spread and backwash effects in a process of cumulative causation.

The approach of Sir Arthur Lewis (1954), starting from unlimited supplies of labour, was also couched in the need to provide alternative employment opportunities for the exuberant labour in the agricultural sector and was driven by the need to stimulate demand for labour from the more productive industrial sector. It is exemplary that none of these theories was based on the idea that developing countries lacked domestic resources or domestic savings or finance that could be cured by importing capital from abroad. The possibility of external impulses to the development process from foreign trade was looked upon as a complement to domestic demand (e.g. Furtado 1964).

Other theorists looked more directly to the 'Keynesian' solution to the problems of providing employment to the expanding available labour force in developing countries, by suggesting that the Roosevelt administration's New Deal policies might provide a guide to solving the underemployment problems facing developing countries. Lauchlin Currie, who had championed Keynesian ideas in response to the Great Depression in the United States (US), later became an envoy of the World Bank to Colombia and an adviser to that country. He noted: 'It is curious that so little attention has been paid to the lessons that might be learned from wartime experience, especially in the United States. Given an overriding objective to which everything is subordinated, the production possibilities are almost unbelievable' (Currie 1966, 81). He thus proposed policies concentrating on supporting demand, first in relation to agriculture and manufacturing: 'by neglecting the demand side and focusing on the supply, not only do developing countries waste resources and increase inequality, suffering, and poverty, but there is no greater growth in supply than there would have been in absence of additional investment' (ibid., 38). He quotes Sidney Dell approvingly: 'An underdeveloped country's first concern is to find useful employment for those of its citizens who at the present time are adding little or nothing to the national real output and income' (ibid., 94).

THE LATIN AMERICAN APPROACH TO DEMAND: TENDENCY TO DECLINE IN THE TERMS OF TRADE

Development discussions in Latin America commenced from rather different initial conditions, as most countries had achieved political independence in the first half of the nineteenth century and some of them had experienced a process of domestic industrialization based on external trade and finance with their former colonizers. But as Prebisch

(1950; see also UNCTAD 1964) pointed out, this was primarily due to the symbiosis between the output of primary materials in the Latin American periphery that found a stable demand in the expanding industrial production of Britain to satisfy the Empire. British capital investments that funded industrialization in South America could be easily serviced with the export of primary commodities. When Britain ceased to be the industrial workplace of the world, replaced by an industrializing country, the US, with its own natural supplies of primary materials, this relation turned antagonistic, and economists such as Prebisch, Singer (1964) and Myrdal (1956, 1957) questioned the ability of developing countries to trade their way to development on the basis of earnings from primary commodity exports alone. This argument, based on the idea of a trend of deterioration in the terms of trade between primary commodities produced in the South and manufactured goods produced in the North is also at its heart a discussion of the role of demand in development.

As is well known the terms of trade are normally presented as a differential movement in the prices of primary commodities and manufactured goods to the detriment of the former. Thus, if developing countries are to generate the finance required to build up a manufacturing sector by purchasing manufactured-goods exports from developed countries, they would have to increase primary-export volumes more rapidly than the expansion in supply reduced international prices. If developed-country demand is price-inelastic, then export revenues may actually decline, causing an external constraint to development.

But that is not all there is to the problems caused by the declining terms of trade. Prebisch was among those who did not see much application for Keynes's theory to the development problems of Latin America. In particular, he returned to the classics and placed emphasis on the role of technical progress, something that was virtually absent from the short-period concerns to reduce excess capacity of the existing stock of productive assets that was at the centre of the analysis of the *General Theory*. Instead Prebisch's real concern was how to ensure that the increase in output per man (and thus the decline in the demand for labour) from technical progress could be transformed into increased real incomes which could generate a demand for labour being displaced by the technological change. A concentration on agricultural production meant a concentration of technical progress in agriculture, and an increase in output that was not required to feed the population but would simply increase the excess labour supply. The excess would have to be exported in exchange for manufactured goods which could be used to build up an industrial sector to absorb the displaced agricultural workers. But if the higher productivity in agriculture brought only lower export prices, there would be no increase in incomes to buy developed-country exports and no increase in domestic real wages to provide increasing demand for the outputs of a nascent industrial sector. Further, if the prices of manufactured goods were administered and the productivity in industry passed on in terms of higher wages for developed-country workers, then their real incomes would increase as a result of both the improving domestic productivity and the improved agricultural productivity in developing countries, producing the fall in the relative price of primary commodities they purchased. This would increase demand for manufactured-goods outputs and even higher productivity due to larger domestic markets for manufactured goods. The successful expansion of industry in developed countries was thus the mirror image of the impossibility of a similar expansion in developing countries,

because the increased demand from higher productivity was being passed on to real wages in the developed rather than the developing countries. This led to the idea of the unequal exchange (Emmanuel 1972) between developed and developing countries, or the interdependence between the needs of development in the centre and the consequent underdevelopment in the periphery that was eventually formalized in dependency theory (Frank 1966; Dos Santos 1969). But the real problem was that the potential increase in purchasing power that could have increased real wages and demand for domestic manufactures was being transferred from developing countries to developed countries via the decline in the terms of trade.

This approach also led to criticism of theories such as Rostow's *Stages of Economic Growth* (1960), which suggested that there was a singular path from underdevelopment to development which could be articulated in a general theory of stages of development and which was eventually measured statistically in the work of Chenery (1960). If the advance of the developed countries depended on the underdevelopment of the rest, then there could be no linear advance of all countries to a stage of economic 'maturity'. At the same time, as Gerschenkron (1962) suggested, the external conditions that developing countries face would change over time, making the catching-up process easier from the perspective of technical innovation, but more difficult from the point of view of the appropriate institutional structure to support development.

LATIN AMERICAN STRUCTURAL DIVERSITY

It was these considerations that led to an emphasis on the structural difference in the behaviour of developing countries, especially in Latin America, and led structuralist-developmental economists to argue that the analysis of Latin American development could not be undertaken on the basis of neoclassical or even Keynesian theory, which was appropriate to developed countries but provided little contribution to the resolution of the structural problems impeding Latin American development: 'underdevelopment, specific phenomenon that it is, calls for an effort at autonomous theorization. Lack of such an effort has led many economists to explain by analogy with the experience in developed economies problems which can be properly expressed only through full understanding of the phenomenon of underdevelopment' (Furtado 1964, 139–140).

The identification of these structural diversities allowed the role of aggregate demand to be downplayed and the important role of structural transformation of demand in different structural conditions to be emphasized. This initially took the form of highlighting the impact of conditions inherited from the Spanish or Portuguese colonial past such as land-tenure systems, indigenous labour supplies and other factors (cf. Stein and Stein 1970).

The most generalized application of the structuralist argument that is associated with economists working at the United Nations (UN) Economic Commission for Latin America and the Caribbean (ECLAC) may be found in the theory of unbalanced productive structures proposed by Marcel Diamand (1978). It is a theory of quantity adjustment similar to Keynes's idea of output adjustment. Diamand noted that the growth process in developing countries was not an even one with all sectors expanding as appropriate to maintain an overall equilibrium. Some sectors had inherent differences in the response

of supply to price changes. Thus, if the price mechanism were free to allow adjustment to equilibrium for sectors with more inelastic outputs, an increase in demand could only generate an increase in prices, but little expansion in output. The result would be a rise in general prices, which would reduce the level of real wages and induce a shift in the distribution of income towards those inelastic sectors in the form of Ricardian rents. This would cause a decline in the overall level of income until the demand for the input in short supply had contracted to the quantity available. Thus the market-driven price-adjustment process in conditions of unbalanced production would create rising prices, lower aggregate output and a shift in income distribution until adjustments in supply were forthcoming. In some sectors this might be possible but slow; in others structural factors, market imperfections or controls could prevent adjustment. Diamand thus follows Keynes's (1937) recommendation (cf. Kregel 2008) with respect to the United Kingdom economy that sectoral adjustment must accompany policies to increase demand and also support the policies of balanced growth advanced earlier.

While these structuralist-developmental theories eventually produced the theory of import-substitution industrialization, this characterization is only correct to the extent that any strategy based on the need to find alternative employment opportunities for workers expelled from the agricultural sector due to technological advance and a decline in the market for primary commodities in developed countries would of necessity conclude that a more balanced production structure between primary commodities and manufacturing would be required, and such a conclusion would imply the rejection of comparative advantage and the necessity of building up domestic production to compete with and eventually replace imports from developed countries. In this sense the support of industrialization is independent of whether the subsequent growth strategy is export-led or import-substituting. But, irrespective of which policy is chosen, it will eventually involve import substitution.

It should thus be clear that irrespective of any problems associated with import substitution, arguments against it are arguments against the use of an expanding manufacturing sector to absorb the expansion of labour supply produced by technical progress in agriculture. This raises the additional question of what type of industrialization process will take place, and what sectors will be expanded and provide substitutes for previously imported goods. Many of the difficulties associated with import-substitution strategies are linked to these choices (cf. Griffin and Enos 1970) and have provided the justified criticism for inefficiencies in the application of these strategies (cf. Diamand 1978).

In addition, an often overlooked aspect of import-substitution industrialization (ISI) is that it is based on the particular financial structure that emphasizes domestic finance. Indeed, many of the difficulties associated with Latin American developing countries' ISI strategies result from the high capital inflows of the late 1970s engineered as a global response to the energy crisis. If foreign capital is borrowed to finance investment in import-substituting sectors it reduces the need for foreign exchange to purchase the imports, but it generates a counterbalancing demand for foreign exchange to meet the costs of imported capital equipment, and more importantly to meet the debt service. Since the domestic production does not produce foreign sales or foreign exchange, foreign borrowing to finance import substitution leads to a tightening of the external constraint which can only be met by an increase in foreign borrowing.

THE POST-WAR SUPPLY-SIDE APPROACH AND THE MONETARIST COUNTER-ATTACK

Indeed, this reliance on foreign borrowing was the premise of the approach to development promoted by multilateral and official institutions in the immediate post-war period. Rather than emphasizing the use of policies designed to expand demand for existing resources, they found the cause of underdevelopment on the supply side and sought to resolve these constraints by operating supply-side policies to augment the role of the market. This approach to building on the supply side was based on the presumption that developing countries faced resource constraints and savings constraints due to low levels of per-capita incomes. With savings limited, investment could not rise at rates that were sufficiently high to provide for increasing income. The solution was to be found in channelling external resources to developing countries, and official agencies supported the transfer of resources from developed to developing countries to finance investment that could not be funded from domestic savings. In addition, proposals such as McKinnon's (1973) argued that financial repression – that is, the control of the domestic monetary system to produce a favourable environment for investment via low interest rates – was actually the cause of low savings rates and low investment expenditure. This provided an argument for the liberalization and deregulation of the financial sector.

The genesis of this supply-side approach was the result of a blend of the neoclassical theory of distribution and the newly emerging theories of long-run economic growth. According to marginal theory the return to capital is inversely related to its quantity, and since developing countries lacked capital its return there should be higher than in developed countries where it was abundant. Thus a perfect international capital market should lead to investment of developed-country savings in developing countries. (cf. Viner 1947)

A more subtle explanation came from the need to provide a policy for the UN's first Development Decade. Having set the target as a 5 per cent annual growth rate, the Harrod–Domar formula predicted that with capital output ratios of around 3, the developing countries would be short of savings of an amount equivalent to around 1 per cent of developed-country gross domestic product (GDP) in 1960. Given the negative impact of the 1930s Depression on private capital flows, it was thought that they would be negligible, despite the argument concerning relative rates of return just cited (see Viner's pessimistic view, 1952) and estimated at around 0.3 per cent of GDP. Thus the official development-assistance target of the UN was set at 0.7 per cent of developed-country GDP to be transferred to developing countries. Despite the fact that this target has never been close to being achieved, it remains the official UN target today for real resource transfers from developed to developing countries and is reaffirmed at every official multilateral meeting on development finance. Currently the figure is less than half the target and has never gone much above 0.5 per cent.

Thus at the same time as the development pioneers were emphasizing the importance of demand in mobilizing domestic resources, official agencies and governments were supporting the opposite view that the problem was on the supply side and could only be solved by the transfer of real resources to developing countries. Indeed when the Bretton Woods Institutions revamped their governance structure in the 1970s they created a 'Development Committee' with the official title of Joint Ministerial Committee of the

Boards of Governors of the Bank and the Fund on the Transfer of Real Resources to Developing Countries (see World Bank 1974).

Unfortunately this approach to the operation of international capital markets and the benefits of borrowing foreign savings to finance development is unsupported theoretically as well as empirically. The results of the Cambridge controversies (see Harcourt 1971) vitiate the argument concerning the supposed differences in rates of return to capital in developed and developing countries, while the entire post-war period has been one that is characterized by negative transfers of real resources, that is, that developing countries have in general been sending resources to developed countries, which is what had initially been argued by the center-periphery dependency theorists.

But this theoretical and real-world failure of the resource-transfer approach did not bring vindication to the theories of demand-led development proposed by the 'pioneers'. Instead, as the monetarist counter-revolution challenged the Keynesian-inspired fine-tuning macro-policy approach, a similar counter-revolution was launched against the extension of Keynesian theories to the problems of development (see Lal 1983). This took two lines: the first was to argue against the structuralist idea that developing economies were different from developed economies and thus required different theories and policies. The same policies used with success in developed countries should be adequate for developing countries (cf. Williamson 1989). The second was to attack the role of the protection of state-owned industry in import substitution as producing an inefficient allocation of resources due to rent-seeking behaviour (see Krueger 1974). The solution was to allow the role of the free market to operate more freely both inside and outside developing countries, a proposal that found its official guise in the 'Washington Consensus' (Kregel 2008) recorded by John Williamson (1989, 2002). As already noted, the main policy objective became the introduction of free markets, rather than viewing the operations of the markets as means to achieve traditional development objectives.

The main consequence of the imposition of these policies by the multilateral lending agencies was a rapid acceleration of foreign-capital inflows, which had already become the dominant form of transfer after the breakdown of stable exchange rates and the Bretton Woods system in the mid-1970s. While the Bretton Woods architects had envisaged an international capital market in which most transfers were done by official or government institutions, after the 1970s oil crisis these institutions and the developed-country governments had come to sanction private capital flows to support the recycling of the Organization of the Petroleum Exporting Countries (OPEC) surpluses. The result of these increased flows, instead of meeting the requirement of augmenting the real transfer of resources, was the 1980s debt crisis in Latin America, for which the Washington Consensus was designed as a remedy. And in its turn the rise in private capital flows in the 1990s led to another series of financial crises (see UNCTAD 1998) in Mexico, Brazil (Kregel 1998), Asia (Kregel 1999, 2000a, 2000b) and Argentina (Kregel 2003).

SUPPLY-SIDE EXTERNAL FINANCE, PONZI FINANCE AND INTERNATIONAL CAPITAL FLOWS

This increasingly virulent series of financial crises brought into question the supply-side theory of development based on foreign savings, whether it was done in conditions of

open markets or of state-led development. The reason for this is quite simple and has been known since the early post-war recovery. The supply-side approach implies that net capital inflows will finance developing countries' current account deficits used to import manufactured goods to build up a domestic manufacturing sector. However, the build-up of debt which is incurred in foreign-denominated liabilities has to be serviced, and the only way in which foreign exchange can be earned to service it is through a current account surplus, or by more foreign borrowing. Evsey Domar (1950) has attempted to identify the conditions under which the latter policy could be sustainable by analysing whether the US could run a permanent current account surplus to offset a deficiency of demand in the US in the post-war period. His solution was that it was possible for a country to have a stable ratio of surplus (or deficit) to GDP over time on the condition that its foreign lending was sufficient to increase its stock of outstanding loans at a rate that was equal or greater than the rate of interest charged on the loans. Whether or not Domar's mathematics was necessary to understand the problem, Minsky's financial instability hypothesis (cf. Minsky 1986) would have quickly identified what was a supposed sustainable position with a Ponzi scheme. Domar's solution is to continuously borrow enough to meet the rising debt service on the increasing stock of foreign borrowing. Thus developing countries would have to continue to increase borrowing to meet debt service. Further, if the interest rate on the debt was greater than this then the share of debt to GDP would be explosive (as has again been proven by the difficulties facing the Southern-tier euro countries). In any case, the probability that private lenders would be willing to finance their own interest and principal repayments on a rising amount of outstanding debt is unlikely.

This then provides a third reason why the supply-side approach to development is untenable. But this leaves the problem of how a developing country can finance its demand-led mobilization of domestic resources. The answer is that the financing cannot come from private foreign sources at market rates of return. This is true even for borrowing in the domestic currency. There is a view that the problem with foreign lending is the problem of the currency mismatch: borrowing in a foreign currency to fund domestic activity earning the local currency. But even if the borrowing is in terms of the domestic currency the problem remains, as evidenced by the Tequila Crisis, in which Mexico had sold peso-denominated debt to foreigners in an amount that was about five times its foreign-currency reserves. When the rise in the foreign deficit brought fears to foreign lenders who tried to sell their pesos for dollars the reserves were exhausted and the peso-dollar exchange rate would have gone to infinity, had not convertibility been suspended. The peso denomination of the foreign borrowing had no impact on the end result of the financial crisis.

HOW TO FINANCE DOMESTIC DEVELOPMENT WITH OR WITHOUT FOREIGN FINANCE

If external finance cannot provide sustainable finance for development, then what is the solution? There appear to be two possibilities. The first involves a return to either grant financing or an enhanced role for multilateral financial institutions in providing non-market long-term financing. For a country seeking to finance its development on the

basis of foreign borrowing this would require a strict adherence to the Nurkse principle that increasing incomes go to domestic capital formation, or to the Prebisch principle that they go to generating investment in exporting industries. It might thus be possible to arrange a three-stage process, in which in the initial stage of building up a domestic manufacturing sector the country experiences an increasing external indebtedness to finance the import of essential capital equipment that generates export potential. In a second stage, exports are sufficiently developed to generate an external surplus which starts to reduce external indebtedness, which eventually manages not only to meet debt service but also to pay down the external borrowing. At this stage the external debt burden declines as the manufacturing sector becomes internationally competitive and the country starts to have a positive overall balance and becomes a foreign lender to other developing countries. The difficulty with this approach, which had been envisaged by World Bank researchers in the immediate post-war period (see Kregel 2007), is that it would have required concessional funding or long-term private sector funding of 40 years or more, something that private capital markets are not able to produce in normal conditions.

Failing this possibility, the solution is to rely on domestic financial resources to finance the mobilization of domestic financial resources. This would require financing of development in the domestic currency and from domestic investors. But according to traditional theory this approach would be thwarted by the lack of domestic savings to finance the required level of demand or by an unwillingness of domestic investors to finance development at rates of interest that allow the government to fund its development programmes, because of the rising risk associated with increasing government debt or the debt of government-guaranteed development institutions. But these objections misunderstand the architecture of modern monetary systems. According to the theory of soft currency economics (see Mosler 1996, 1997–1998), now better known as ‘modern monetary theory’, countries that finance expenditures in domestic currency and have flexible exchange rates have what is called ‘monetary sovereignty’. This approach, generated from Keynes’s theory of money, Minsky’s theory of banking, Knapp’s state theory of money (1924 [1895]) and Lerner’s (1943; 1951, Chapter 14) formulation of functional fiscal policy, demonstrates that there is no effective constraint to government financing of investment except the maximum production capacity of the economy to produce goods and services. According to this theory the government solves the problem raised by Minsky (e.g. 1986) that anyone can issue liabilities (IOUs); the problem is to get them accepted. By imposing a tax liability on its citizens that can only be extinguished by rendering the government’s liabilities the government creates a ready demand for its coin and currency. Citizens will have to provide goods or services to the government to be able to meet these tax liabilities. In this view, it is not the government that has to finance its demand for goods and services from the private sector, but the private sector that has to offer its goods and services to the government to finance its tax bill. Since there is no effective limit to the ability of the government to issue its own liabilities to pay for its acquisitions, it follows that the same must be true of its debt-service liabilities. Thus, government liabilities should be considered risk-free since there is never any economic constraint to redeeming them or paying debt service. In essence this means that the government never needs to borrow to finance its activities, and thus development cannot be constrained by the willingness of domestic investors to fund government deficits. Nor is there a minimum interest rate that must be paid to attract the required savings.

Indeed, according to this theory the issue of fixed-interest government liabilities such as notes and bonds is only necessary to offset the impact of government spending on bank reserves. When the government makes acquisitions it does so by means of a credit account at the central bank. The credit is transferred to the seller of services in the form of a credit to its bank account. The result is an increase in its bank's reserves, which other things being equal will create a condition of excess supply of reserves which will drive interbank rates to zero bid. If the monetary authority seeks a higher interest rate it will be necessary for the government to borrow the excess reserve funds by issuing positive interest rate debt to the banks or to the households. The result of the approach of monetary sovereignty is, then, that domestic support of development via government expenditure can never be constrained by the necessity of selling government debt to the private sector or by some specific rate of return. Further, since the private sector will need government liabilities for liquidity reasons other than meeting tax obligations, the government budget will of necessity be in deficit or existing tax liabilities could not be met. Thus, it is not government savings that limits the demand needed for development, nor can it be the lack of private-sector savings.

MONETARY SOVEREIGNTY AND CAPITAL CONTROLS

Like Keynes's theory, this approach was formulated with developed countries in mind, as an argument to support the use of Keynesian expenditure policies to produce full utilization of productive capacity and full employment. But it seems to be just as applicable to developing countries, with the appropriate adaptations noted above with respect to the appropriation of Keynes's theory of effective demand and disguised unemployment. In particular, the formulation of the theory for developed economies precludes fixed exchange rates or the application of anything similar to the gold standard because such currency arrangements preclude monetary sovereignty, for they guarantee a payment of debt in a foreign currency for foreign lenders or domestic holders of foreign debt.

But for developing countries the exchange rate is not a variable that can be left to the international capital market. This is the leitmotif of what has come to be called the 'new developmentalism' (see New Developmentalism 2010; Bresser-Pereira 2009; Frenkel 2008; Frenkel and Damill 2011). This is basically because of its impact on the ability of developing countries to formulate and execute strategies to develop domestic manufacturing industry. According to this 'new' approach to the traditional theory of developmentalism, less developed countries' policies are constrained by two structural elements. The first is a tendency for real wages to grow at less than the rate of productivity growth. This is a basic tenet of the Prebisch–Singer–Myrdal tendency for declining commodity terms of trade, but here it represents the generalized difficulty in generating domestic markets capable of supporting domestic industry of a size sufficient to generate economies of scale. The second is the tendency to overvalue the exchange rate required to produce an equilibrium in the manufacturing sector. In the approach of both Kaldor (1965 [1964]) and Diamand (1978), the exchange rate required to allow a newly created manufacturing sector will in general diverge from the exchange rate determined by the exports of the primary commodity sector, a problem aggravated by any appreciation in dollar prices of commodities. The equilibrium exchange rate for the economy as a whole

thus places the developing manufacturing sector at another disadvantage in addition to those created by small internal markets and the inefficiencies associated with a start-up production operation.

The obvious conclusion is that the demand-led approach to development financed by monetary sovereignty will require controls on foreign capital flows. For possible measures, see Gallagher et al. (2011). Indeed, from the position of the 'new' developmentalism these resources are not needed and are detrimental to the financial stability of the development process. Thus they must be either eliminated or controlled. This would imply reversing the traditional strategy of encouraging developed countries to transfer financial resources to developing countries, to convincing them to control or eliminate these private transfers. Since they clearly do not produce an efficient international allocation of capital, as has been seen in the aftermath of the 2007–2008 financial crisis, there is no economic or developmental reason for them to exist. Indeed, many developing countries have been convinced to liberalize and open their domestic capital markets in order to attract international investors and direct investments which they do not need, and which have usually been the source of domestic financial crisis. The examples of Japan, Korea and Mexico are instructive in this regard. Thus the constraint currently facing developing countries is a type of financial terms of trade, in which allowing the international financial market a comparative advantage determines the structure of their domestic financial structure, and the structure of external financial flows produces repetitive crises that prevent a steady mobilization of domestic resources and employment. But, it is these things that should be the objectives of development policy, not the efficient international allocation of financial services.

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28. Development planning

C.P. Chandrasekhar

The term 'development planning' gained ascendancy in the period immediately after World War II, when decolonization led to the emergence of a number of newly independent underdeveloped countries. War fatigue and the conflict between competing systems resulted in considerable concern with addressing the sharp differentials in levels of development and standards of living between these economies and the developed countries, so as to ensure a durable peace. That paved the way for an interest in strategies that could accelerate development in the former.

Accelerating growth required diverting a part of the meagre national income away from consumption to investment in order to raise the rate of growth. While for a time this squeeze on consumption could be moderated by relying on foreign savings (to the extent available), in the final analysis domestic savings and investment needed to be raised. Not surprisingly, the principal developmental task as formulated by Arthur Lewis and his fellow experts in a 1951 United Nations report was to raise the rate of investment or the ratio of investment to national income, so as to raise the rate of growth achievable at any given level of capital-output ratio.

Raising investment in itself is not enough. It needs to be allocated across sectors in ways that prevent other potential bottlenecks from subverting the process of development. The allocations chosen would depend on what are considered the binding constraints on development in individual countries. If, for example, the principal constraint to investment is seen as the absence or inadequate development of a capital-goods sector and there is inadequate foreign exchange to import capital goods, then the attempt at raising investment to accelerate growth would run up against a capital-goods constraint. This was the problem the Mahalanobis (1955) model applied to India sought to resolve by emphasizing the need to allocate a higher share of investment to the investment-goods sector in the early stages of development, even if that meant stretching the period over which aggregate and per-capita consumption are raised to address their inadequacy.

In most developing-country contexts, a more serious constraint on growth is the shortfall in the availability of food, which constitutes an overwhelmingly large part of the goods that make up the wage basket. Increases in output and employment result in increases in wage-goods demand that far exceed domestic supply. This necessitates imports and could again lead to balance-of-payments problems or, if imports are not resorted to, triggers food-price inflation that in multiple ways constrains growth.

It has been argued (Kalecki 1976 [1970]) that the principal factors constraining agricultural growth are institutional, such as semi-feudal relations, making institutional change central to relaxing the wage-goods constraint. While this cannot be denied, it is also true that within any institutional frame, achieving the maximum possible rate of growth would require a certain level of investment (in irrigation, drainage and flood control, for example). The existence of slack, for lack of investment to exploit the available potential,

could make it possible to raise the supply of necessities and at least partially resolve the wage-goods constraint by directing investment to the agricultural sector. Beyond a point this would have to be combined with the required institutional change. Thus, for any given level of the investment-to-income ratio and the associated rate of growth, there would be an appropriate allocation of investments (given initial conditions) that ensures sectoral balance and renders the growth path sustainable.

Finally, the issue is not merely one of investment allocation but one of technologies in which investment in different sectors would be embodied. On the one hand, accelerating employment (and therefore consumption) growth in the immediate future requires investing in labour-intensive technologies. On the other hand, restraining consumption and raising the share of surplus available for investment may require opting for capital-intensive technologies, given the possible rate of technological change. This may provide a case for raising the average capital intensity of technology even in a country with substantial volumes of surplus labour (Dobb 1960; Sen 1960). It would also call for matching the inevitably capital-intensive technologies adopted in some sectors (such as heavy engineering) with a choice of more labour-intensive technologies in the consumption-goods sector, for example.

Whatever the decisions taken, given initial conditions, political feasibility and technological imperatives, the essential point that emerges is that once governments choose to influence the pace of development, as they did in the immediate post-war years, they need to find ways to intervene in order to push the rate of investment, the allocation of that investment and the technologies in which the investment is embodied in directions that correspond to some ideal appropriate for the targeted rate of growth.

AREA OF CONTROL

Development planning in this form obviously presumes some degree of coordinated investment decision-making. The expected benefits from such coordination are twofold. First, by overcoming the 'secondary uncertainty' inherent in a regime where investment decisions are atomistic and based on 'guesstimates' of the decisions that other decision-makers would arrive at, it reduces the waste and unemployment characteristic of capitalism (Dobb 1960). Second, by ensuring the incorporation of appropriate intertemporal judgements in the choice of the investment ratio, the allocation of investment and the technical forms in which it was embodied, it permits a process of maximizing growth subject to the consumption requirements set by social and political conditions.

The difficulty is that, unlike in some hypothetical (though not necessarily actual) economy with a substantial degree of state ownership of productive assets, in which surpluses largely accrue to agencies of the state and in which the volume of such surpluses can be determined by a combination of turnover taxes and an appropriate prices and incomes policy, the state in a mixed economy is not in control of consumption and investment decisions. In the latter case, the level and allocation of investment gets determined by the 'guesses or expectations of a large number of independent decision-takers (entrepreneurs), in the long run "revised" by *ex post* movements of market prices' (Dobb 1960). Since the resulting investment in fixed capital is not by definition reversible, decision errors are costly in individual and social terms. And such errors are bound to occur,

since private investment decisions must be based on estimates of prices that would prevail over the lifetime of the project.

One consequence of these circumstances is that existing prices cannot be a guide to future prices, as the atomistic, individual investment decisions made on the basis of the prevailing prices together influence future demand and supply and subsequent movements in prices. Without an anchor, there is no reason to surmise that expectations would actually be realized, leading to unutilized capacity, closure and unemployment. Moreover, the allocation of investment may not be in keeping with that required to ensure the pattern of production needed to raise the rate of saving and investment and to maximize the rate of growth. An obvious way in which this happens is through inadequate investments in the infrastructural sector characterized most often by lumpy investments, long gestation lags, higher risk and lower profit. Given the 'economy-wide externalities' associated with such industries, inadequate investments in infrastructure would obviously constrain the rate of growth.

ROLE OF THE PRIVATE SECTOR

While the absence of coordination in investment decision-making leads to such results, in most developing countries that were seeking to launch strategies of accelerated development after World War II, the state or state-appointed and controlled agents were not the only ones making investment decisions. With a few exceptions most of these countries opted for a mixed economy framework, where most consumption and savings decisions and a substantial share of investment decisions were taken by agents in the private sector of the economy.

One problem of being a mixed economy with a predominant role for private decision-making is that the system would tend to be demand-constrained, rather than supply-constrained, as would be the case in an ideal socialist economy with social ownership of the means of production that provides the basis for investment planning. However, implicit in the idea of development planning was the presumption that there was a difference between a developed capitalist economy that was largely demand-constrained and an underdeveloped or less developed mixed economy. Kalecki (1976 [1965], 20–23) explained this difference as arising from what were the very different problems of developed and underdeveloped capitalist economies. In the more developed ones, output tends to fall and resources tend to be unutilized because there is no necessary reason why investments should match the volume of capitalist savings out of profits. Resolving this problem requires raising the level of investment, through autonomous public expenditures for example. In sum, 'the role of investment in establishing a certain level of national income is not associated with the final destination of the former'. Whatever its direction, 'it generates the same effective demand' (*ibid.*).

On the other hand, in a mixed, underdeveloped economy, while there may be deficiency of demand that restrains growth, the more crucial problem is that even when available capacities are utilized, the capital stock will be inadequate to absorb the labour force in full. An important problem here is 'the deficiency of productive capacity rather than the anomaly of its underutilisation'. Therefore, investment needed to be stepped up, 'not for the sake of generating effective demand, as was in the case in an underemployed

developed economy, but for the sake of accelerating the expansion of productive capacity indispensable for the rapid growth of the national income' (Kalecki 1976 [1965], 23–24).

This was a characteristic that underdeveloped economies partially shared with centrally planned economies. This did not mean that they were exactly similar to a socialist economy, since demand deficiency remained, and command over capital and resources and the distribution of income were very different in the underdeveloped, mixed economies. But the need to mobilize the maximum resources for investment and to raise it over time called for planning (Sachs 1977). This required the state to use a combination of tax and subsidy policies, and measures of intervention such as controls over capacity creation and production, to influence the level and allocation of private consumption, savings and investment.

According to Sachs (1977), there were three minimum conditions Kalecki had specified for planning in a mixed economy: controls over external trade and financial relations, to guard against instability, enhance domestic policy space, as well as reserve foreign exchange for priority imports; controls over investment, to keep the private sector out of low-priority or undesirable areas and direct public investment to crucial areas to which private capital does not flow; and ensuring stability in the prices of essentials, by removing institutional constraints to the expansion of the supply of necessities, even while permitting demand increases by encouraging labour-intensive public works, housing and agriculture.

There are two ways in which controls over trade help, in the form of controls over imports. The first is that they permit the use of the available foreign exchange to import goods that are needed to support activities that are prioritized. The second is that they restrict international competition and generate incentives for the creation of domestic capacities to service the domestic market. Opting for import controls to incentivize domestic production presumes that there exists a domestic market large enough to support scale-economic plants in multiple industries. It is in such economies that investment planning makes sense, to identify sectors that are best expanded in order to benefit the economy as a whole and direct a higher share of investment to such sectors.

If controls over imports were imposed merely with the idea of making the best use of foreign exchange, with growth largely based on exports, as may happen in smaller or far more backward economies, then investment has to be in keeping with requirements set by external demand and market signals. In such contexts, development planning tends to focus, on the one hand, on choosing investment options in the public sector, given the available financial resources; and on the other hand, on framing policies and providing the support services needed to help the private sector play its designated role. Since the requirement for public capital formation in any stage of development tends to exceed the resources available with the state, forms of cost–benefit analyses are used in the planning process to identify the projects that need to be prioritized.

In contrast to Kalecki, Arthur Lewis (1966) emphasized the importance of this kind of planning, given its relevance in a large number of underdeveloped countries, such as many in Africa, in the immediate post-war years. In the case of such countries, for a host of other reasons as well, more formal investment planning, based on an explicit (or even implicit) macroeconomic model would, according to him, not only not yield the expected results but even be a mistake. The government should in the first instance focus on bringing 'order, priority and foresight into government expenditure'. Having done that, it

should adopt policies that induce decision-makers in the private sector to do what they should, that otherwise they may not do. The elements of such development policy he lists are as follows (Lewis 1966, 10–11):

1. Investigation of development potential: surveys of natural resources, scientific research, market research.
2. Provision of adequate infrastructure (water, power, transport and communications) whether by public or private agencies.
3. Provision of specialized training facilities, as well as adequate general education, thereby ensuring necessary skills.
4. Improving the legal framework of economic activity, especially laws relating to land tenure, corporations and commercial transactions.
5. Helping to create more and better markets, including commodity markets, security exchanges, banking, insurance and credit facilities.
6. Seeking out and assisting potential entrepreneurs, domestic and foreign.
7. Promoting better utilization of resources, both by offering inducements and by operating controls against misuse.
8. Promoting an increase in saving, both private and public.

It should be clear here that what is being identified as development planning is a process in which the state is planning its own expenditures and adopting policies that induce and facilitate the private sector to undertake investments that the pursuit of purely private interest may not encourage, despite the substantial social benefit they involve.

This role for the private sector and form of state–private sector relations has two important implications. The first is that it veers away from centralized to substantially decentralized investment decision-making. This, however, need not be as serious a problem as it appears to be. In practice, there is no known economic system in which all, or even overwhelmingly most, investment decisions are taken by a centralized decision-making body that could ensure the necessary coordination of investment. Complete state ownership is near impossible to achieve, and even when ownership is ‘public’ there can be considerable lack of coordination in decision-making because of the need for decentralization. As a result central planners have inadequate access to the wide and enormous range of information required to execute their implicit brief. This ‘informational inadequacy’ arises only partly because of the difficulties involved in creating a framework which allows for the collection, collation and transmission of the required information at a fast enough pace. It also results from the fact that agents at lower levels of implementation and governance may choose to hold back and not transmit crucial information, or even find incentives for transmitting partial or incorrect information, which puts the whole mechanism at risk.

This leads up to a second inadequacy, which is the belief either that the objectives and goals of agents at all levels of decision-making or implementation (including shop-floor workers or workers in agricultural co-operatives or state-owned farms) are common, or that all agents can be made to adopt the objectives considered appropriate by the central planners.

Finally, there is a real danger of ‘bureaucratization’ at the higher levels of decision-making. Such bureaucratization not only could lead to wrong investment decisions,

influenced by sectional rather than societal interests, but could also be replaced by objectives and rules which are not perceived by the planners as being socially accepted as best for society, but which are considered best by the planners, and not necessarily always from a societal point of view. Decentralization may be needed to guard against this.

However, the choice of the degree of decentralization must to an extent be arbitrary. To quote Maurice Dobb (1960), within the theory of planning 'no clear-cut logically defined frontier can be drawn between the province of centralised and of decentralised decision', and 'only experience can decide the expedient extent of the one and the other'. The area of control of planners can never be complete. But as the boundary separating centralized and decentralized decisions is shifted, expanding the ambit of the latter, the ability to realize *ex ante* goals declines. Opting for planning and deciding on what kind of planning is sought to be done requires a prior decision on where that boundary must be drawn.

Besides favouring higher levels of decentralization, the Lewis version of development planning also opts for market-mediated decentralization. It implicitly sees development planning of different kinds within a mixed economy framework as being points on a continuum that has the 'ideal', centrally planned system at one end, and a totally anarchic, completely market-driven system (that has not been observed in reality) at the other. But as the role for 'decentralized', market-mediated and atomistic decision-making increases, or as the policy regime moves from one end to the other of the above continuum, at some point planning in any meaningful sense is no longer feasible. This is precisely what the transition to neoliberal regimes in many underdeveloped countries has delivered.

A second difference in the Lewis-type perspective is that it questions the relevance of an overall macroeconomic strategy of the Mahalanobis kind, which requires influencing private decisions quite strongly. In the case of poorer underdeveloped economies Lewis questions the need for even 'indicative planning', involving a detailed macroeconomic forecast of likely trends in the whole economy as a way of persuading private individuals to undertake investments they may abjure if left to themselves. In his view:

Indicative planning presupposes that the economy responds mainly to domestic demand, as is the case in mature economies. In very poor economies exports are most usually the engine of growth, and development depends mainly on opening up new export possibilities, or making better use of existing possibilities. The planners can therefore take the market for granted, and concentrate on opening up new natural resources for development, or improving the utilization of existing resources. An interrelated model begins to be useful as the economy begins to exploit the opportunities for import substitution, and to develop a complex pattern of inter-industrial relationships. (Lewis 1966, 7).

But even in an import-substituting growth context he is sceptical. To quote:

If the Government controls the private sector, through licenses, quotas and price-fixing, or attempts to influence the private sector through subsidies, it needs a well-articulated model to ensure that its decisions are both efficient and mutually consistent. A controlled private sector is like the public sector in that, if sensible decisions are to be made, they should be made in accordance with some programme. Now there is no doubt that the market economy, left to itself, gives the wrong answers in underdeveloped countries. Prices do not correctly reflect relative costs. Opportunities for reducing risks through coordinated action are neglected. Insufficient allowance is made for the value of knowledge acquired through unprofitable activities, and so on. The temptation to control the private sector, or at least to induce businessmen to do what they would

not otherwise do, is therefore almost irresistible. Of course, an equally impressive case can be made against Government control of business; the Government is inefficient, corrupt, wasteful, not impartial, and so on. (Lewis 1966, 6).

Sukhamoy Chakravarty (1987, 4–5) has a more sophisticated formulation of the way in which plan and market can be combined. In his view, in developing countries like India, following Adolph Lowe: ‘the term “plan” should distinguish between planning as a form of “instrumental interference” . . . and “planning” as an alternative to a market system based on “command and fulfilment”’. Similarly the term ‘market’ ‘may be alternately viewed as a coordinating system or as an expression of an industrial system based on “consumers’ sovereignty” judged as an ultimate value in itself’:

The first interpretation of the market can with justification be understood as an implementational one, and not necessarily inconsistent with planning as a mode of ‘instrumental inference’. In other words, it is perfectly possible to allow the macro goals of a system and the principal action directives to derive from a properly formulated plan, while its micro analogues are left to be implemented through the market. (Ibid.)

While this does make an effort to justify formal planning with substantial decentralization through the market, it leaves many of the problems that can arise in the process inadequately addressed.

Lewis goes further to conclude as follows:

The distinction between an ‘indicative’ and a ‘controlling’ Plan is important. The Plans made by Communist countries are documents of authorization; they tell each industrial unit what it must produce and how much it may invest. A Development Plan, on the other hand, authorizes nothing. Even public expenditure is authorized not by the Plan but only by the Annual Budget passed by Parliament. The figures in a Development Plan indicate expectations, aspirations and intentions, but are not binding commitments. (Lewis 1966, 8)

Development planning is then reduced to finding the best ways to get the private sector to adopt some socially beneficial decisions that it may ignore, often to its own detriment. It essentially becomes a matter of process, involving a few or all of these:

(i) a survey of the current economic situation; (ii) proposals for improving the institutional framework of economic activity; (iii) a list of proposed Government expenditures; (iv) a review of major industries; (v) a set of targets for the private sector; (vi) a macroeconomic projection for the whole economy. (Lewis 1966, 11)

STRUCTURAL CHANGE

The notion of development planning summarized in the previous paragraph, however, misses out on one fact. The thrust of development planning, and therefore the choice of regime, was also influenced by the initial conditions that prevailed in underdeveloped economies, which were all predominantly agrarian and home to substantial volumes of unemployed and underemployed surplus labour. The vision underlying development planning had two strands to it, with different degrees of emphasis on each in different versions of it. One strand was to introduce the institutional changes, undertake the

investments, and ensure the availability of a surplus of wage goods, so as to mobilize the surplus labour and put it to work on projects that created productivity enhancing capital assets. To the extent that capital formation was possible with 'bare hands', the resources required were the consumption goods needed to feed and clothe the labour force engaged in capital goods production.

The other aspect of the vision was to ensure the diversification of economic activity away from agriculture to producing manufactured goods, especially machine tools. Besides the apparent universality of this trajectory across countries, a range of arguments provided a case for such diversification. First, the conclusion derived from trends in consumption styles across the globe, and embodied in rudimentary form in Engels's Law, that the demand for non-food commodities in general and manufactures in particular grows and diversifies as incomes increase. Growth must therefore be accompanied by a process of diversification of economic activity in favour of manufactures. Second, the belief that, given the barriers to productivity increase characteristic of predominantly agrarian economies, the diversification in favour of industrial production is an inevitable prerequisite for a rapid increase in per capita incomes. Third, the view that beyond a point even agricultural growth is dependent on manufactured inputs. And finally, the truism that dependence on primary production places a nation on the losing side of the shifting terms of exchange in international trade, necessitating industrialization as a device aimed at garnering additional benefits from trade and overcoming external vulnerability.

Diversifying in favour of manufacturing, especially based on demand generated in the domestic market, was of course not necessarily easy for many mixed economies. Small landlocked or island economies cannot sustain much of an industrial sector based on the domestic market, and can emerge as successful manufacturing exporters only in exceptional circumstances. Hence a strategy focusing on ensuring a significant degree of diversification in favour of manufacturing may be misplaced in their case. So would attempts to apply elaborate models defining trajectories that can be pursued to achieve manufacturing-country status. As Arthur Lewis noted: 'Whether the economy responds mainly to export demands, or grows mainly in response to home demand, is also important' (1966, 21). In the latter, a combination of assessments of export prospects and policies aimed at regulating imports and promoting exports to grow on the basis of an export stimulus may be important. Here, a degree of independence for private decision-making is inevitable. But what is appropriate for countries with special needs or special constraints cannot form the basis of defining what development planning is.

In any case, models are not the prerogatives of the so-called authoritarian planners. Often elaborate models are used to justify submitting not just private but even public decisions to purely market signals. The idea of using 'border' prices and price relatives as the basis for assessing the relative costs and benefits of proposed public projects, to determine which among them should be chosen, is a case in point. The claim that adopting this 'rule of thumb' would be a way of approximating outcomes that would fall out of an optimization exercise, besides resting on completely untenable assumptions about markets and price determination, obfuscates completely what the social welfare function being maximized is, and what the real constraints are.

RESOURCE MOBILIZATION AND THE PUBLIC SECTOR

A more important case for caution when formulating an interventionist development plan is to take into account the socially and politically defined area of control of the state. While the extent of influence on private decisions cannot be taken for granted, one way in which the state can impact on development in terms of a limited but prior plan is by mobilizing resources and undertaking activities within the ambit of the public sector. Public sector intervention in economic activity in developing countries occurs in the first instance because of the unwillingness of private investors to enter areas characterized by lumpy investments, long gestation lags, high risks and lower returns. Many such projects may be characterized by significant positive externalities from the point of view of overall growth and industrial development. This would obviously be true of infrastructural projects, investments in which are a prerequisite for development. But they would also be true for some investments (such as in machine tools or heavy engineering) that are seen as important within the planned strategy of development.

Thus, while state investment in economic activity may be inevitable, it could also be seen as a means to realize a planned allocation of investment. In either case, the state would have to ensure that it is able to mobilize the required resources to finance such investment. In sum, tax policies and other forms of resource mobilization are crucial even when it is not the private but the public sector that is responsible for the investment decisions concerned. In this case, the allocational failure would most often occur not because the state does not have the vision or inclination to undertake the investment required, but because it is unable to mobilize adequate resources by taxing the private sector.

The problem of intention or inclination arises when the investment decision is to be made by the private sector, requiring the state to ensure adherence to its explicit or implicit plan for the level and allocation of investment by the private sector. In principle, there are two ways in which such adherence can be sought to be achieved (Jones and Sakong 1980). One is to use diverse measures of intervention varying from taxation to licensing to circumscribe the field of operations of the private sector, offer incentives or rewards to make them choose a preferred investment option within that field, and use price and production controls to realize a multiplicity of more specific objectives with regard to equity, employment and regional spread. The other is to find ways of ensuring that a private sector agent actually chooses the preferred investment option or a particular point in a loosely circumscribed field. An important difference here relates to the nature of the regime of intervention, between the use of instruments of intervention, such as licensing policies, production controls, price control measures, and so on, or of less visible means of enforcing compliance.

Which of these regimes prevails is often not a matter of choice but a reflection of the historically evolved relative strength and influence of the state and private capital. When the state dominates over capital there is a greater degree of reliance on less tangible measures of enforcing compliance, as was reportedly the case in a country such as South Korea. On the other hand, where the private sector is in a position to stand up to the state, as was true in India, compliance is not easily enforced, necessitating a greater degree of reliance on detailed physical controls, besides a host of financial controls.

INFLUENCING PRIVATE DECISIONS

That having been said, there is no gainsaying the fact that little can be achieved by way of development planning without some influence over private decisions. As even Lewis noted:

The passage from planning the public sector to reviewing the private sector was made at an early stage. It was inevitable, partly because these sectors are inter-related, but still more because the rate of economic development depends more on what happens in the private sector than it does on expenditures in the public sector. (Lewis 1966, 2)

Quantitative targets that make sense of a plan are not realized without private compliance.

Choosing what is feasible to get the private sector to do is no easy task. Costs and prices have to be calculated and private profits have to be estimated to check feasibility. Once that is done the rewards, incentives and penalties that must be used to move private decisions in desired directions need to be identified. And once projections for individual industries are generated, based on this, the consistency of such projections across industries needs to be ensured. This inevitably takes the planner towards some kind of a macroeconomic strategy, however loosely formulated.

Further, in any strategy of growth, special attention needs to be given to promoting new industries or sectors that are seen as having the best prospects in the domestic or foreign market. Even in developing countries which choose or are forced to choose a more mercantilist strategy of growth based on a rapid acquisition of larger shares in segments of the world market for manufactures, not only do these segments have to be identified by an agency with greater seeing power than individual firms, but that agency must also ensure an adequate flow of cheap credit to these entities so that they can not only make investments in frontline technologies and internationally competitive scales of production, but also have the wherewithal to sustain themselves during the long period when they build goodwill in the market, which is a function of time. The state must not merely play the role of investment coordinator but use the financial system as a means to direct investment to sectors and technologies at scales of production that it considers appropriate. Equity investments, directed credit and differential interest rates are important instruments of any state-led or state-influenced development trajectory. Development planning is about standing above the single private decision-maker and bringing to bear a more holistic view of the development process.

INTERCOUNTRY VARIATIONS

Nevertheless, the area of control that governments assume they have, and therefore the extent to which they presume they should influence or determine private decision, would vary across developing countries. Heavy-duty planners in countries like India had as their objective realizing allocations (of the kind indicated in the Mahalanobis model) that were close to what planners in the Soviet Union opted for based on the Feldman model and more complex intersectoral consistency exercises. Other countries settled for models that were closer to the indicative planning of the French kind, combining broad

macroeconomic projections with indications of what the government would like to achieve and supportive tax and other measures.

The Mahalanobis model started with the assumptions that the possibilities of transformation through trade were limited for countries like India (which were predominantly exporters of primary products and traditional manufactures) and that the principal constraint on development was the absence of a capital-goods sector and, therefore, the inadequate domestic production of machines to employ the available labour force. If in addition the capital stock available at any period of time was 'non-shiftable', pre-empting the transfer of machines meant for producing consumption goods to the task of producing machines, then the capacity of the investment-goods sector determined the level of investment that could be undertaken in any period. Since, for any given average capital-output ratio in the economy, the addition to output depends on the level of investment, the rate of growth of the economy would be higher, the greater the rate of accretion of capital stock. This meant that the task of realizing a higher rate of growth is best served by the allocation of a higher share of investment to the investment-goods sector and, within it, concentration on the production of 'machines to produce machines' rather than 'machines to produce consumption goods' (Bhagwati and Chakravarty 1969; Patnaik 1996).

Denoting investment by I , consumption by C , the output-capital ratios in the investment and consumption goods sectors by β_K and β_C , and the share of investment allocated to the investment and consumption goods sectors by λ_K and λ_C , we have:

$$I_t - I_{t-1} = \lambda_K \beta_K I_{t-1}$$

$$I_t = I_{t-1} (1 + \lambda_K \beta_K)$$

$$I_t = I_0 (1 + \lambda_K \beta_K)^t$$

Further:

$$C_t - C_{t-1} = \lambda_C \beta_C I_{t-1}$$

and since:

$$C_t - C_0 = (C_t - C_{t-1}) + (C_{t-1} - C_{t-2}) + \dots + (C_1 - C_0)$$

we have:

$$C_t - C_0 = \lambda_C \beta_C I_{t-1} + \lambda_C \beta_C I_{t-2} + \dots + \lambda_C \beta_C I_0$$

$$C_t - C_0 = \lambda_C \beta_C I_0 (1 + \lambda_K \beta_K)^{t-1} + \lambda_C \beta_C I_0 (1 + \lambda_K \beta_K)^{t-2} + \dots + \lambda_C \beta_C I_0$$

$$C_t - C_0 = \lambda_C \beta_C I_0 * \frac{\{(1 + \lambda_K \beta_K)^{t-1} - 1\}}{\lambda_K \beta_K}$$

Since $Y = C + I$, we have:

$$Y_t = Y_0 [1 + a_0 \cdot \frac{\{(1 + \lambda_K \beta_K)^{t-1} (\lambda_K \beta_K + \lambda_C \beta_C)\}}{\lambda_K \beta_K}]$$

where: $a_0 = I_0/Y_0$.

Since normally we should expect that $\beta_c > \beta_k$, any increase in λ_k , while reducing growth in the immediate short run, would raise it in the long run. What emerged, therefore, is that, if it was presumed that adequate surpluses of wage goods could be produced and made available to meet the consumption needs of those employed in the investment-goods sector, even countries with surplus labour and relatively low per-capita consumption should opt for higher shares of investment in the investment-goods sector.

Among the criticisms that the Mahalanobis strategy (not the model *per se*) has been subjected to (Patnaik 1996), two are of particular relevance. The first is that it did not recognize the potential strength of the wage-goods constraint, once the possibilities of transformation through trade were seen as limited (constraining imports of wage goods). Kalecki (1976 [1970]) had explicated the argument that, given limits on the possibilities of transformation through trade, the institutionally determined maximal rate of growth of production of agricultural necessities sets a ceiling on the non-inflationary rate of growth of the system. This was one of the ways in which the availability of surplus real resources was seen to constrain the pace of development in predominantly agrarian economies. It is of course true that even if there existed a maximal rate of growth of production of agricultural necessities, it need not be the case that the system has attained that rate. Growth could be short of the maximum because of other inadequacies. For example, the 'slack' in the system could possibly be exploited by increasing investments in irrigation, drainage and flood control, allowing the rate of growth to be raised without resorting to major institutional change. Failure to exploit that opportunity may have set the maximal rate of non-inflationary growth at a lower level, as a result of supply-side constraints in the agricultural sector. But as Chakravarty (1987) noted, Mahalanobis seemed to be implicitly assuming that agriculture was a 'bargain sector' where, unlike in industry, production can be increased and surpluses released with little investment and some institutional tinkering.

The other substantial criticism of the Mahalanobis strategy is that it was based on a view of the state that rendered it independent of the economic structure, and capable of wresting an area of control and successfully adopting policies that can substantially influence decisions with regard to consumption, savings and investment in the private sector. That proved to be wrong in the Indian context, indicating that either the institutional structure had to be changed to accommodate for Mahalanobis-style, heavy-duty planning, or a less ambitious strategy, predicated on a much smaller area of control for the state, had to be settled for. That is the direction which planning has taken in India, not to mention in countries that did not even experiment with this style of planning.

Coming to terms with this reality, a strand of the literature on development planning focused on the process of planning, in terms of the collection and collation of statistics and information, analysing the constraints set and opportunities offered by conditions

at the time of the initiation of the plan, defining the desired pace and pattern of growth, estimating savings and investment ratios and formulating intersectoral consistency requirements. Arthur Lewis seems to have won out, not because the alternative was infeasible or impractical (as he suspected), but for the reason that governments with the intention, will and social sanction to embrace those alternatives in full have been rare in the past, and are even rarer now.

There is one less damaging way in which the development planning agenda has been eroded in practice. Given the extreme economic and social deprivation that affected populations in underdeveloped countries, most development plans had a section focused on programmes and plans aimed at alleviating the worst forms of deprivation through direct action. Targets set for these were internationally elevated to the status of Millennium Development Goals (MDGs).

This implied that the war against deprivation was separated into two components: one that was to be waged through a successful and more inclusive or equalizing growth strategy, and another to be waged through direct public action to address extreme poverty, illiteracy, high mortality and morbidity, and debilitating hunger, among others. As the focus shifted away from national development strategies and development planning proper, development plans increasingly took the form of human development plans, gaining credence from the international attention given to the MDGs. Incorporating forms of welfarism into its own agenda, neoliberalism seeks to legitimize itself by packaging its ideology with new views of justice, new ways to define development and new policies to give development a human face. Neoliberal policies are presented as unavoidable if growth that generates surpluses to distribute is to be achieved; but distribution itself, it is argued, must be dealt with independently of growth. In the process government intervention and planning in favour of the majority is reduced to the implementation of a few programmes aimed at making a market-determined strategy more inclusive. In this way, too, the larger development planning agenda has been undermined.

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29. The Nordic route to development

Lars Mjøset

The label ‘Nordic model’ is applied in increasingly diverse ways, but the following account concentrates on one of the classic uses: the suggestion that the development of the Nordic countries can serve as a role model for the development of developing countries aiming to catch up with the leading economies. The label ‘Norden’ here refers to the five larger Nordic countries: Denmark, Finland, Iceland, Norway and Sweden, the main members of the regional organization, the Nordic Council. While many actors – such as the Nordic agencies of development assistance – claim that there are Nordic policy ideas that may be transferred, my point of departure is a detailed historical and comparative investigation of Nordic development patterns since the industrial revolution and on to the 1970s. For experience to be transferred, I provide a lot of historical experiences, but the crux of the matter is that there can only be learning if there is symmetric contextualization at the receiving end. I return to this topic in the conclusion.

This chapter has two major points of departure. First, my use of the term ‘model’ as a social science concept applies to large units, such as nation-states, phases of the world economy, regions (in the world economy or within countries), or international regimes. In the following, I deal with nation-states and regional clusters of such states. I rely on social science research leading to case-based macro-comparisons between countries, but of course not disregarding their integration into a broader world-economic setting.

Second, the study of institutions plays a crucial role. These may be of national scope, at other times broader (Western world), at other times again regional, or even local. In particular, my reasoning is in line with the historical-institutionalist tradition (Mahoney and Rueschemeyer 2003; Mjøset 2015). This converges with non-neoclassical institutional economics, which may be seen as an integral part of case-based comparisons as a broader approach, one which pursues the study of large processes in historical contexts. It is important that research on institutions exploits the full potential of macro-comparative methods. Alternative development theory must rely on case-based social science (Mjøset 2009).

THE LAYERING OF INSTITUTIONS IN NORDIC DEVELOPMENT

Local research frontiers are taken to indicate properties of development, and they point to domains (issue areas) in which institutions are formed (Mjøset 2009, 60–64). These frontiers provide keys to the properties it is necessary to distinguish in order to make analytically precise comparisons. They must be related to one core category. In the following, this is socio-economic development. I use this term as a shorthand for economic, political and social development – the core concerns of development studies as an academic field. While this is my core category, other local research frontiers can be relied upon, partly

by defining their outcomes as properties, partly by relying on their analysis of shared properties. I shall employ a terminology based on the institutionalist study of varieties of capitalism (Mjøset 2015). I shall present the main terms with reference to the periodization in Table 29.1.

The first two columns provide an external periodization of the world economic and geopolitical context that influenced the Nordic countries. The basis is a historical timeline drawn from Perez's (2002) periodization of five long surges since the earliest industrial revolution. The techno-economic paradigms implied (the leading capitalist economy is given in brackets) are: the cotton textiles-based first industrial revolution since the 1770s (Britain), the age of steam and railways since the 1830s (Britain), the age of steel, electricity and heavy engineering since the 1870s (Britain, United States, Germany), the age of oil, the automobile and mass production since the early twentieth century (United States), and the age of information and telecommunications since the 1970s (United States). All the small Nordic economies were exposed to international trends that were threatening but that also implied options for development. For instance, as Pax Britannica reached its peak in the 1840s and 1850s, the Nordic countries felt British economic competition but could also benefit from the new technologies (textiles, railways) that were diffused from the core of the world economy.

Perez's framework works well in situations of full hegemony in the world economy (Pax Britannica, Pax Americana), but must be modified for periods marked by extensive uneven development and fragmenting warfare in the world economy, that is from the 1870s to World War II (WWII). I refer to three features characterizing the international context: diffusion of leading technologies, phases of openness and closure in international economic relations (trade, capital flows), as well as geopolitical relations (war or peace).

In the second column of Table 29.1, the period 1914–1945 is neutrally defined as the war/interwar period. Perez lets her fourth surge of Fordist mass production, mass consumption extend from 1908 to 1974. But due to uneven development, the United States (US) was clearly ahead of the Nordic countries at that time. Perez's periodization does not capture the Nordic countries in the first half of the twentieth century. They were still busy industrializing on the heavy engineering platform, and despite the growing number of cars and the more generous consumption levels in some urban areas, the economic situation was difficult for both workers and peasants. The broad surge of mass consumption was a post-war phenomenon.

The third column depicts the political system with reference to the state of democracy: a first long period is prior to democracy, then there is the breakthrough of mass democracy, followed by two varieties of routinized democracy. With this property added, the periodization traces what Rokkan (1999) calls the interaction of the industrial and democratic revolutions in the Western European area. It traces the mobilization of the main social movements in a macro-situation marked by an international context of evolving techno-economic paradigms and international institutions, and national-level processes of democratization connected to state formation and nation-building.

Starting with the fourth column, I define six Nordic periods corresponding to the six world-economic periods. For each of these periods, the fifth column indicates one or more main areas of institutional development, based on social scientific and historical studies of the various institutions that have influenced the economic, political and

Table 29.1 *Periods of Nordic capitalism in a world-economic and geopolitical context*

1.Long surges	2.Internationalization	3.Political system	4.Type of Nordic capitalism	5.Institutions	6.Aggregated	7.Dynamics
Preconditions	Mercantilist structuring of the world economy	Authoritarian absolutist		Family farms, church, state and dominant export sectors		
1.Textiles 1780s–	Napoleonic wars (protection, blockade, then opening)	Predemocratic	Transitional, agrarian	Educational and other institutions of skill formation	Liberal	Peasants
2. Railways 1830s–	British hegemony Pax Britannica		Agrarian, peasant mobilization	Institutions of local governance		
3. Heavy engineering 1870s–	Weaker British hegemony; international gold standard	Emerging mass politics	Paternalist	Paternalist institutions at the firm level; early social protection	Corporate	Workers
3/4. War/ inter-war period 1910s–	International fragmentation, collapse of world trade	Turbulent mass politics	Capitalism with fragile democracy	Institutions of social partnership. Social protection institutions revised		
4. Mass consumption 1945–	Pax Americana; peak of US hegemony; open for trade, tight regulation of financial flows	Routinized democratic mass politics	Embedded	Institutions of social protection and social partnership generalized; institutions of expert knowledge	Interventionist	New middle classes
5. ICT 1975–	US weakening – coping with financial openness		Internationalized welfare	Regulatory institutions mitigating global/ national processes		

Notes:

Long surges (techno-economic paradigms) follow Perez (2002).

‘7. Dynamics’ indicates elite/movement dynamic.

social developments of the Nordic countries. In the sixth column, I sketch an even more aggregate periodization, combining the six periods into three pairs, defining three broad periods of Nordic capitalism: liberal, corporate and interventionist. The seventh column roughly indicates that the dynamics between social elites and social movements can be seen as drivers of institutional change.

Liberal capitalism in Norden was marked by peasant mobilization, corporate capitalism was marked by working-class mobilization, and interventionist capitalism was marked by middle-class mobilization. Given the institutionalist perspective, this dynamic can be discussed with reference to a modern term such as ‘institutional design’. The institutional complexes analysed are not generally the result of conscious designs. They are responses in distinct historical conjunctures by collective actors with limited foresight. Still, the sequence suggested above may be reformulated as follows: it is as if an initial elite blueprint for institutional design is countered by mass mobilization that envisions institutional designs in which the role of the mobilizing group is greater than in the initial blueprint. This entails the assumption that in times of major social change, elites start to work on institutional designs early on, while movements need time to organize and move into positions of influence. One therefore often finds a pattern marked by elite offensives that are later countered by mobilization from below.

Institutional frameworks consist of layers of different historical vintage that can be located along the periodized historical timeline. Moving through historical periods towards the present, the institutional framework consists of an increasing number of institutional complexes. Roughly speaking, this chapter studies three types of institutional complexes: capacity institutions (schools, other skills-related organizations, innovation and technology policies), short for capacity-building institutions, including what is called systems of innovation or ‘systems of competence building’ (Miettinen 2013; Lorenz and Lundvall 2009); social protection institutions (health, age, family, social policies; Esping-Andersen 1990, 1999; Huber and Stephens 2001); and social partnership institutions (routines, formal agreements and legal provisions related to incomes policies; Vartiainen 2011; Moene and Wallerstein 2008).

In analysing the relationship between these complexes, the concepts of complementarity and co-evolution are useful. Complementarity indicates the degree to which institutions – due to co-evolution – match each other, thereby coming together to produce the outcomes studied. In this case, this outcome is socio-economic development, understood as the combination of growth and social development, where the latter indicates that the benefits of growth are distributed in ways that avoid social polarization, in terms of strongly skewed distribution of income and other resources, chronic economic strife between groups (defined in ethnic, religious or other terms), and/or authoritarian breakdown of democratic political institutions.

Co-evolution indicates adjustment processes between older and more recent institutional complexes. The closer the co-evolution, the stronger the complementarities. The more incoherence between various institutions and institutional complexes, the weaker the complementarities. The theoretical foundations of this perspective can be elaborated with reference to historical institutionalism (Thelen 2014), varieties of capitalism (Iversen and Soskice 2012) and heterodox, institutional economics (Hodgson 2004).

Patterns of institutional complementarity are consolidated as elite and movement representatives interact – in more or less conflictual ways – to face structural changes in the

small state, depending entirely on its open economy. One might be tempted to conclude that in the Nordic cases, the resulting ‘institutional design’ has strengthened complementarities between institutions of various vintages.

The question of institutional complementarities must be raised anew for each period. The moulding of institutional complementarities is not always frictionless. Co-evolution may lead to stronger or looser institutional complementarities. Some ‘projects of institutional design’ have threatened to undermine elements of the historically established complementarities. As will be seen, there have been periods of instability, and some major institutional developments have not been retained; they have proven to be non-complementary, and quite different institutional solutions have emerged (see the section on ‘Paternalist Capitalism’ below).

In retrospect, the Nordic sequence of institutional co-evolution appears as cases of ‘successful’ development. But the closer focus on three different institutional areas and six periods at least shows that the recent virtuous circles – most recently visible in the fact that all case countries except Iceland had no problems during the financial meltdown of 2008 – should not be identified with overall success. A period of conflicts may reach a productive solution (for example, Nordic labour-market constitutions in the interwar period) and thus yield virtuous development in a longer-term perspective. It is important to note – and I intend to show this below – that there have been projects of institutional design that have been undermined by social mobilization processes.

In six sections below, I provide brief portraits of each historical phase since the late eighteenth century. I start with the international context, then focus on the institutional area in which the most significant new developments take place. I also provide some – however selective and partial – analyses of the co-evolution of the older institutions with the most recent institutional complexes.

For a short chapter like this, there are major limits to how much detail can be provided. A more comprehensive treatment could start from the comparative differences, thereafter specifying limited generalizations for each period. That would yield distinct comparative portraits. The short account here cannot provide such portraits, but at least it can illustrate important institutional features in the history of Nordic capitalism. The conclusion will refer to these historical features in light of challenges for present-day developing countries.

PRECONDITIONS

As Rokkan (1999) made clear in his analysis of democratization in Western Europe, processes of state formation after the industrial revolution were partly determined by specific sets of preconditions. I shall briefly summarize the most important ones, given this chapter’s focus on political-economic development.

Family Form

The oldest precondition worth mentioning is the family form. Historical demography claims that a North-Western European family form emerged some time between 1000 and 1300 (Hajnal 1965; Laslett 1976). The geographical extent of the North-Western

European family form when it first emerged was roughly: England, Scandinavia (except Finland), Germany, Poland, Northern France, Benelux, Switzerland, Austria and parts of Bohemia (Oesterdiekhoff 2008, 87).

This form can be contrasted with the patrilineal extended family, which still exists in several varieties across the world. The latter has unilinear affiliation (descent is traced through the father's lineage), while the North-Western European form is cognatic (line of descent is arbitrary). The patrilineal form has the extended family as the main unit, while the North-Western form is based on the parent couple. Marriage patterns differ significantly. In the patrilineal form young men marry early, and the proportion of unmarried men is relatively low; the North-Western European form, in contrast, is marked by a high age at marriage and a high proportion of unmarried men. In the patrilineal form, the wife moves in with her husband's family; while in the North-Western European form marriage depends on whether a new household – under the given economic conditions – can be formed. As an ideal type, it includes only two generations (parents and children) living in a separate household. The new family is socially, legally and economically self-reliant. It is not part of a complex, larger family group or clan.

In the North-Western form, then, women are co-founders of self-reliant households, not just a new element introduced into the husband's family. Both spouses contribute inheritance, savings and capabilities. Varieties of the patrilineal extended family tend to accept polygamy, and divorce on the male initiative is generally allowed. The North-Western European form, in contrast, tends towards strict monogamy and prohibition of divorce (except for specific circumstances, such as infertility of the wife). Uniquely, the widow is allowed to remarry if the husband dies. Thus, it often takes the form of 'successive polygamy', and in this way, the unity of family, household and business is maintained. The consequence is that, before the industrial revolution, the status of women was better than in any other known civilization, and patriarchy was weaker (Oesterdiekhoff 2008, 92–93, 99–100). Both women and children were better protected from death and misery in hard times.

This long-term historical difference is a relative one. It does not contradict the obvious fact that even in Northern Europe, there were marked elements of patriarchy. But the strong position of women in the present-day Nordic model should be seen in light of these longer-term features. Note, however, that the analysis above relates to families in an agricultural and craftwork setting. With industrialization, household and production are separated, and the two-generation nuclear family spreads in urban, industrialized areas across the world. Obviously different European and non-European roots still play a role through institutions, both informal ones such as customs and norms connected to marriage and family life, and formal ones, particularly family law (regulating inheritance, rights at divorce; Bradley 1996). The challenge is to understand the precise processes whereby such historical roots are reproduced under industrial capitalism, both as normative and legal structures.

Protestantism

Another cluster of preconditions can be linked to Protestant religion. The Reformation started in the early sixteenth century. Lutheran propaganda reached Denmark in the 1520s. Its impact in Sweden was less direct, linked to Sweden's warfare with Denmark.

There were more High Church elements in Sweden and this church retained more independence of the state than in Denmark/Norway (Thorkildsen 1997, 139ff.). Despite these differences, in both cases church and state became very close. In Catholic Europe the church 'remained supraterritorial and did not to the same extent prove an agency of nation-building' (Rokkan 1999, 144). The North European 'break with Rome not only nationalised religion, it legitimised the national vernacular standards as languages of worship as well as of statecraft' (Rokkan 1999, 164f.). The next three preconditions are specifications of this Protestant legacy.

Administrative Traditions

There were important differences between Danish and Swedish bureaucracy during absolutism. In Denmark, the King – in alliance with the merchant bourgeoisie – kept the nobility out of his administration (Østerud 1981). In the eighteenth century, Pietists were given priority as administrators under the Danish King. There was strong inspiration from Prussia, where the Kaiser relied on administrators from Pietist universities (Sørensen 1998, 368). In Sweden, nobility remained a part of the state apparatus much longer than in Denmark. Thus, the Danish tradition was more meritocratic (Mungiu-Pippidi 2011).

Early Reading Skills

In the seventeenth century, steps were taken 'to enforce elementary education in the vernacular for all children. The established national churches simply became agents of the state' (Rokkan 1999, 286f.). Johansson (1977, 29) noted three main features. First, in the Nordic area, the ability to read came much earlier than writing skills. These did not need to develop together. Second, reading skills were promoted from above; in Sweden, for instance, by the Church Law of 1686 under King Charles XI. All across Norden, this development preceded industrialization. Third, reading campaigns were enforced without schools. The state placed the responsibility on the parents, and the church would conduct yearly examinations at the household or village levels, testing reading abilities and knowledge of the Bible. This institutional complex entailed strong social pressure. No person could be confirmed until they could read and repeat the catechism. Only confirmed people could get married, and give their oath in a court of justice (Johansson 1977, 30).

In sum, the Nordic countries had high literacy rates early on. The least-developed and smallest member of the Nordic group, Iceland, was particularly early, since it also had an 'unbroken literary heritage' (Johansson 1977, 34). By the 1780s, around 90 per cent of the population above 12 years was literate (Karlsson 2001, 171). The Nordic indicators are extreme, but literacy figures were relatively high for the whole Reformist-Protestant area. For all of Protestant Europe, the estimate is that about 35–45 per cent (of the total population) could read in the late eighteenth century (Cipolla 1964, 61). This may be related to the North-Western European family form (its extension mostly converges with that of Protestantism), and the church's emphasis on the national vernacular. However, I cannot explore these features in more depth here.

Early Social Mobilization

The Protestant state churches in Denmark and Sweden exerted an elite influence from above, but there was also the unanticipated consequence of religiously charged mobilization from below: small, unofficial religious meetings of laypeople, conventicles, multiplied. They practiced religious worship led by lay preachers, thus requesting the right to assemble without consulting the Protestant state church, represented by the local parish preacher. In the Nordic eighteenth-century agrarian societies, Pietism emphasized the individual's faith and the autonomy of the congregation. These family gatherings and broader congregations can be seen as early promotion of an independent civil society, although couched entirely in religious terms. The mobilization of these revivalist movements allude to core topics in the mobilization of later, more secular movements, such as the right to assemble and freedom of opinion. Pre-political and political vocabularies were intertwined (Nielsen 2009; Thorkildsen 1998). The state had required its citizens to read, but by the mid-eighteenth century, the state actually had to pass conventicle ordinances, restricting the activity of the revivalists. In Sweden, the state and the church clearly considered Pietism a disturbing element, issuing a strict ordinance in 1726. In Denmark, Pietism was influential even in the state, so its law (1741) was milder.

In line with a general sociological multi-level approach, I have so far – using Rokkan's (1999) terms – covered culture and politics. It is also necessary to look at economic preconditions.

Dominant Export Sectors

One set of such preconditions are the staple export sectors, as analysed in economic geography. All the countries had experience with exports of staple goods: Iceland and Norway were traditionally major suppliers of dried fish; Norway, Sweden and Finland were major exporters of timber; Sweden also had a major tradition of iron exports, due to its rich iron ore deposits; Denmark, finally, was a major corn exporter (Senghaas 1985 [1982]; Berend and Ranki 1982; Mjøset et al. 1986; Mjøset 2007). Denmark/Norway, and even Sweden, were also important in shipping.

Transformation of Agriculture

Another set of economic preconditions concerns the social structure of agriculture. In all these countries, a development towards a family farm structure had started before the Napoleonic Wars. The process started first in Norway (late seventeenth century), where a degree of peasant ownership already existed. In the late seventeenth and early eighteenth centuries, freehold was established in Norway as well as Sweden/Finland (starting in the 1720s), mainly linked to developments in other trades: forestry, mining and fishing. In Sweden/Finland peasants could buy land from the King, becoming crown peasants, and after 1789, non-nobles could buy land from noblemen. In Denmark, peasants were legally emancipated in the late eighteenth century. Feudal ties (*stavnsbånd*) were abolished in 1788. Some peasants could acquire land but often became heavily indebted. In Sweden, the legal system of the estate society and its system of taxation (*jordnatur*) defined ownership and rights connected to the possession of a property, which was a function of the

owner's position in the social hierarchy. This system was revised, stripped of differential privileges, becoming more like a regular property register (Østerud 1978, 150). At this time, there was considerable population growth, and enclosures were implemented as a response. These processes continued into the nineteenth century.

The Development of Nordic Capitalism

I have provided a list of preconditions for socio-economic development in the Nordic area. One can think of them as elements of a conjuncture: the family form possibly co-evolved with agrarian transformations, and the state with its state church after the Reformation interacted with religious individualism and autonomous organizations of revivalist movements. However, there is no space here to specify such an analysis. I shall leave my loose sketch of the historical preconditions, in order to investigate how Nordic capitalism developed under the long-term influence of the industrial and democratic revolutions that diffused through Europe from the late eighteenth century.

TRANSITIONAL, AGRARIAN CAPITALISM, 1780s–1830s

The British industrial revolution transformed the textiles industry, with cotton as the most important input. But soon the European state system exploded in more than 20 years of the French Revolutionary Wars (1792–1802) and the Napoleonic Wars (1803–1815), including naval blockades. The two Nordic units ended up on opposite sides in the war. As a consequence, Sweden (siding with Britain) lost Finland to Russia (1809), while Denmark (siding with France) lost Norway to Sweden (1814) (Mjøset 2003). With the region plagued by war and blockade, not many technological impulses were spread before post-war reconstruction began after 1814 (Vienna Congress). When Britain emerged as the dominant centre of the world economy, the Nordics, in close geographical proximity just across the North Sea, benefited from the diffusion of technologies. When the economy picked up again after a first post-war slump, the institutional legacies from the eighteenth century proved important.

The institutional feature noted in Table 29.1 – mainly education, the most crucial part of capacity institutions at the time – represents the coming-together of the economic, administrative and cultural preconditions. Literacy as well as relatively good health conditions (low infant mortality; Thorvaldsen et al. 2008) indicate a capacity to adapt to external impulses.

In a contribution of central relevance to the comparative study of Nordic development, Senghaas (1985 [1982]) claimed that the key feature was the (relatively) egalitarian distribution of land and income. Secondary employment in forests and fisheries secured some cash incomes to even the poorest farms, so there was rudimentary domestic demand for simple manufacturing goods, such as stoves for the households. Senghaas sees this as an early and basic generative structure behind the virtuous circle of economic development in the Nordic area. This structure was fertile ground for backward and forward linkages based on the dominant staple-export sector (Senghaas 1985 [1982]; with reference to Hirschman's staple theory of economic development).

In Denmark/Norway, Hans Nielsen Hauge (1771–1824) was a lay preacher who also

founded businesses. He created the largest religious revival ever to have occurred in Norway. With a huge reading public, Hauge naturally focused on the paper and printing trades, but also engaged in the traditional Norwegian staple trade in fish. He was also active in farming, as well as in salt production along the coast during the harshest years of blockade. Hauge organized conventicles as collectives that could produce material goods in order to earn money for further religious mobilization. He engaged in what Max Weber termed 'worldly asceticism': believers should engage in production, thereby challenging the rich producers. In his movement, women were largely on an equal footing with men (Furseth 2002). This is one case of preconditions coming together: literacy, entrepreneurship, religious mobilization, pushing for the right to speak one's own faith and to publish in a public sphere. The setting was a non-democratic one, and Hauge's deeds led to his imprisonment.

Considerable elite restructuring took place during and at the end of the war (Sweden/Finland 1809, Norway 1814). The Vienna treaty established a European framework, and this was the context for elite offensives. As noted, Denmark and Sweden's administrative systems differed: the relatively meritocratic Danish system contrasted with Sweden's Vasa state, which united the interests of the King, parts of the nobility, and the freeholders. Sweden oscillated between full absolutism and old-style representative rule (Rokkan 1981, 56–58), and its bureaucracy remained unreformed for many decades: offices were sold, but such excesses were counterbalanced thanks to the long tradition of including lower strata in political structures (Knutsen and Rothstein 1994). However, peasants were uniquely represented as a separate (fourth) estate in the estates system until the parliamentary reform of 1866, and they also held a favourable position thereafter.

The two new states, Norway and Finland, had most of their old regimes cut off, being ruled by a state elite of bureaucrats with considerable autonomy. As a separate grand duchy within Russia, Finland was allowed to retain its Swedish legislation. In Norway, similarly, there was home rule, based on a constitution rushed through in 1814. The new elites had to accommodate the freeholding peasants, as they were represented in the parliament, established by the constitution. Norway's ties to Sweden were weaker than Finland's ties to Russia; the personal union through the Swedish King above all affected foreign policies. In both these countries, the bureaucrats had more autonomy vis-à-vis the King or Czar than in the older states (Sweden and Denmark).

The end of the European wars was followed by a post-war downturn, but as soon as economic activity picked up again, the above-mentioned elites basically aimed to restore their dominance, facing the new situation of agrarian restructuring and early industrializing impulses from Britain. Towards the end of this period and into the next, elites faced a growing wave of associations.

In Denmark and Finland, rulers were highly sceptical of voluntary associations (religious, temperance). Religious mobilization was largely co-opted by the state church. In Norway and Sweden, in contrast, such mobilization flourished on the margins and outside of that organization (Jansson 1988). Iceland was only exposed to conservative versions of Pietist revivalism through the Danish colonial administration. But in that case, there was no bottom-up, radical revivalist response; rather, there was a more direct, nationalist response (Pétursson 1992).

As noted, a structure of freeholder family farms emerged before and through the Napoleonic Wars. Peasants constituted the majority of inhabitants in all these cases.

I covered some trends in the section on 'Preconditions', but the organization of the agrarian sector still differed considerably: Norway's freeholder system was old; while in Denmark, these peasant farmers gained dominance step by step through the early nineteenth century. The various elite offensives through this period all were attempts by the old and more recent elites to stem the pressure from a literate peasant class who knew how to legitimate their claims in religious terms.

INDUSTRIALIZING AGRARIAN CAPITALISM WITH PEASANT MOBILIZATION, 1830s–1870s

From the 1830s on, Europe experienced the high tide of Pax Britannica. Given British technological superiority, they considered free trade beneficial, and even exports of machinery were allowed (1842). Nordic neighbours across the North Sea benefited from the diffusion of the leading textiles and railways technologies that had been pioneered in Britain. The adaptive capabilities noted as a main institutional feature of the earlier period now facilitated industrial transformation – in a still agrarian society – on a British model.

Scattered textiles firms had been established earlier; a pioneer was the English producer Findlayson with a Finnish textile plant producing for the St Petersburg market, benefiting from the customs zone (1811) between Russia and Finland. But the main expansion of textiles production was in the 1830s. Early on, local workers needed instruction from travelling British specialists to make the various idiosyncratic mechanical technologies work (Bruland 1989).

During the mid-Victorian boom (1850s and 1860s), the first railway lines were constructed: in Denmark from 1847, in Norway from 1854, in Sweden from 1856 and in Finland from 1861 (Mitchell 1978, 315ff.). While state capacity had mainly related to territorial integrity, domestic order and safeguarding of economic resources (Rose 1976), the first main addition to this was infrastructure (roads, canals), and above all railways, connected to postal and telegraph services in this part of the nineteenth century.

In this agrarian society with pockets of industrialization, the essential new institutions are related to the mobilization of the broad masses of peasants. I can here provide only a very rough comparative sketch of the particular set of institutions formed under the influence of peasant mobilization from the 1830s and onwards.

In Denmark, peasants were not represented at any level, but step by step the freeholders (*gårdmenn*) gained influence. The relatively 'reformed' bureaucracy of the late-absolutist King – an absolutism guided by 'public opinion' (Seip 1958) – responded to peasant mobilization, and clearly also took into account the mobilization going on elsewhere in Europe. Danish peasants gained influence at the local level in the early 1830s, achieving close to full manhood suffrage in 1849. Denmark then got one of the most liberal constitutions in Europe, and revolutionary riots were avoided. Norway's freeholders could vote since 1814, but it took some decades before they returned their own candidates to parliament. By action 'from above' they secured influence in local government through new laws in this field (Norway's local government laws, *Formannskapslovene*, 1837).

In Sweden and Finland, freeholders were integrated in the estates system, and it is harder to discern separate peasant movements in these countries. In Sweden, the estates

system co-opted the peasants until 1866. In Finland, elite response to popular support for the European revolts of 1830 and 1848 led to a fierce response from the Czar. In 1850, he banned all publications in Finnish 'with the exception of religious and economic literature', and Finland experienced a period of 'dark reaction' (Puntila 1975, 33).

It seems that peasant mobilization in this period was less extensive in Sweden and Finland. But in all countries the impact of the religious revival movements grew stronger. Despite regional differences (north/south, coast/inland), they were all rural movements, and they were 'primarily movements of the peasantry', excluding the landless agrarian population. The clergy (and especially the lower clergy) was the 'connecting link' with the upper classes (Soulinna 1981, 601). This indicates that the reasoning of the rural population was mainly couched in religious terms. In Sweden and Finland, this was the dominant style of mobilization, while Norway and Denmark also had more overt mobilization with direct reference to peasant interests. In Iceland, peasant mobilization was more directly nationalist.

More broadly, the period was marked by a 'spirit of association'. Among the main cases were the temperance movement (Anglo-American influence, for example via the American preacher Robert Baird in the 1830s and 1840s) and the free churches. Jansson (1988) shows that Sweden and Norway proved particularly open to the growth of associations. Neither Norway's bureaucratic state nor Sweden's more aristocratic state worried much about these associations. The Swedish elites seemed happy that they would relieve the state of a number of responsibilities.

In Denmark and Finland, where autocrats (King, Czar) still strove to strengthen their control of municipal institutions to dampen lower-class pleas for national representation, most voluntary organizations were banned well into the nineteenth century. At least, the state was more eager to control them, aiming to co-opt the religious ones (such as the various missionary movements) into the state church. Another cross-cutting difference related to the fact that the Swedish and Finnish church retained more High Church elements.

A liberal vision of possessive individualism spread from Britain during the textiles and railways phase of Swedish and Norwegian capitalism. It was also very influential in Denmark after the last remnants of absolutism withered away in 1849. A peculiar version of such liberalism also spread among many of the peasant groups gaining political influence, as they wanted a very slim state. This view conflicted with the bureaucrat elites and – as will be seen – also with the emerging bourgeoisie, as soon as it came to discover the '*Arbeiterfrage*'.

It is important to note that this was the age of nationalism, voiced mainly by a small intelligentsia of writers and academics, and with particular force in the three countries that were still subjected to rule from the outside. I have already noted the Czar's harsh actions in Finland in the mid-century. Furthermore, Denmark had similar problems with war on the southern front, eventually losing areas in North Germany, events that generated a brief period of intellectual 'Scandinavianism'. Pétursson (1992) sees Iceland's nationalist mobilization since the 1830s as a functional equivalent to radical revivalism, which was lacking in that country.

As early industrialization picked up, conditions for mobilization were clearly most difficult in Finland, while Denmark became increasingly open to mobilization, and associationism flourished most significantly in Sweden and Norway. Given this differentiation,

one can still conclude that in the nineteenth century, Nordic states became open to mobilization. In the earliest cases, this was more than 50 years before fully democratized mass politics. The peasant populations were not turned into clients, represented by various elite patrons. They were at the core of the religious revivalism, based on a reading public that conceived faith as an individual matter. In various fashions, the freeholders also influenced local government. These associations and organizations formed the backbone of an evolving civil society. By the mid-nineteenth century, the peasants had influence, to varying degrees, in their own local 'peasant republics'.

A crucial feature here is the element of trust between the elites and the rural peasant population, incarnated above all in the institutions of local government. Many concepts have been used to characterize this relationship between state institutions and citizens: trust is one (Aubert 1989), 'statist individualism' is another one (Trädgårdh 1997), and 'embedded autonomy' (Evans 1995) could also be used. The main activity of the local governments was poor relief, compensating for some of the most glaring rural inequalities. The fact that the agrarian structure was egalitarian compared to non-Nordic cases should not obscure the fact that there was much poverty, as population growth led to differentiation in the countryside between freeholders, landless peasants (crofters) and free-floating rural labour.

A main element of co-evolution pertained to the school system, developing further the reading capacity already existing as a precondition. Capacity institutions were upgraded. Denmark had already introduced general compulsory schooling in 1814. This was one concession to the peasants, decades before they were granted full representation. Most of the early school reforms – comprehensive primary school – fall in this period. Schools were now organized in relative autonomy from the church. Denmark extended its school to seven years on six days of the week in 1849, Norway introduced it in 1827 (extended to seven years, six days, in 1889), Sweden in 1842 (six years, six days, 1878). Finland's earliest legislation was in 1866 (transferring responsibility from the church to communes) and in 1898 (an Act establishing the principle of compulsory schooling). Iceland was the last in 1907, but on the basis of continuous literacy for more than 100 years (Sysiharju 1981; Flora 1983, 567, 608, 613, 572).

PATERNALIST CAPITALISM, 1870s TO 1910s

Roughly counted, each of the four large Nordic countries had about 100 km of railway lines by the end of the 1850s. By 1890, this had increased twentyfold in Denmark, Finland and Norway (to around 2000 km), and eightyfold in Sweden (8000 km; Mitchell 1978, 315ff.). This extension of the transport infrastructure indicates a much broader industrialization than in the earlier periods. There were numerous linkage effects on small firms and workshops reflecting the capacity of the literate population to acquire skills, producing various inputs and spin-offs (Amsden 2004; Bruland 1989).

Sweden's pace of railroadization was four times that of the others. Sweden's transition into the new techno-economic paradigms – heavy engineering industry based on basic natural science, especially electricity and chemistry – was also particularly rapid (Krantz 2001). By the end of the 1870s, Sweden's Sandviken firm was the largest pig-iron producer in the Nordics, producing heat-change-resistant Bessemer steel for cannons and as

steel plate for shipbuilding. From the 1890s, production was upgraded to more flexible and tougher Martin steel. The firm founded several subsidiaries abroad to resist protectionism. A further case is ASEA, founded in the 1890s, which became Sweden's leading producer in its field, developing a three-phase system for electrical power transfer, including generators, transformers and motors. This firm was thus crucial in the extension of an electricity grid, another huge infrastructure, following – with a lag – the construction of the railway infrastructure. This shows how the earlier and the most recent techno-economic paradigms interacted (Schybergson 2001; Fellman et al. 2008).

Another Swedish firm, Separator, patented the separator, a machine separating cream from milk by centrifugal force, a highly relevant tool in the upgrading of the family farms. Founded in the early 1880s, the firm soon expanded internationally, and by 1900 it was the most specialized of all Swedish machine shops. Only when separation was centralized to dairies in the late 1920s did it go into decline. This case illustrates how areas of innovation were linked to the transformation of agriculture, the very sector upon which earlier social mobilization had been based (Edquist and Lundvall 1993).

Sweden is the most prominent case, but the earliest industrializer, Denmark, kept up despite its dependence on export agriculture. By the late 1870s, B&W was the largest industrial enterprise in Denmark, producing steam engines, mill machinery, steamships and supplies to postal services and the navy. It entered the separator business around 1900, competing with Separator. B&W had acquired the diesel motor patent in 1898 and gained international leadership in diesel engines for ships in the 1910s, as oil was now replacing coal. Like ASEA, it also produced standardized production for power stations. As a response to the cheap corn brought by the railroad transportation revolution, Denmark saw a major transition of its agricultural exports from corn to dairy and slaughterhouse products.

In Norway and Finland, the transition to heavy engineering was concentrated in the paper and pulp business. Finland's leading firm, Gutzeit, was founded by a Norwegian in 1872, and one of the firm's advantages was its command of a transport infrastructure for timber, connecting several large lakes to export harbours. In the early twentieth century, Norway also developed linkages in connection with the development of hydro-powered foundries producing, for example, aluminium. Iceland was clearly the laggard, but a major transformation of its fisheries started with the introduction of internal combustion motors on the fishing vessels.

Agriculture lost much of its dominance. The labour force in agriculture dropped below 50 per cent (of the total labour force) in Denmark in 1887, in Norway in 1895, in Sweden in 1909, in Iceland in 1916, but in Finland as late as 1949 (Alestalo and Kuhnle 1987; Mjøset et al. 1986, 336f.). Note, however, that on the tiny island of Iceland, urban concentrations did not emerge until the early twentieth century. Most of the population lived on farms (but some farms were mainly engaged in fisheries), and the local church was the main cultural and social centre. In other Nordic countries, the agricultural sector supplied labour both to industry and to emigration, which was highest in the 1880s and 1900–1910 for Norway and Sweden, for Finland only in 1900–1910 (Mjøset 1992, Table 4.5; Svaltestuen 1971). Productivity increased due to technical progress.

Throughout this heavy industrialization, capacity institutions were extended and upgraded. Given the relationship to natural science, basic research capacity evolved in the few universities that existed, and engineering high schools and technical universities

were founded. However, there is insufficient space to analyse this co-evolution in more detail here.

Earlier elites consisted of leading state personnel (with lawyers and priests as the main professions), organizers of the traditional export trades, and whatever there was of an aristocracy. As the Nordic countries were able to renew their adaptive capacities and as heavy industry technologies became available, a new fraction of the bourgeoisie developed: owners of larger factories, organizing not just workers, but also hierarchies of managers and engineers. Some of these firms were family firms, others were controlled by financier families. A main case of the latter is Sweden's Wallenberg family, from the 1850s onwards. Most of the firms that became permanent features of Nordic capitalism were eventually organized according to the model of managerial capitalism (Fellman et al. 2008).

The growing size of factories implied a concentration of workers. More complex work environments added to risks, such as the danger of work accidents. There was an ascending labour movement. The founding years for labour parties and trade union federations (in Nordic: LO, *Landsorganisasjoner*), respectively, were: Denmark 1871 and 1898; Norway 1887 and 1899; Sweden 1889 and 1898; Finland 1897–1899 and 1907; Iceland 1916 and 1916. The timings show that only by about 1900 (Denmark somewhat earlier) were there both central union movements and labour parties. Furthermore, at that time there were very few labour members of parliament (MPs).

This implies that for most of this period there was a business-elite offensive to organize work conditions in the factories. There were elements of paternalist thinking. The company would care for the workers, providing services and benefits that would make it unnecessary for them to fight for their rights by means of an external organization. Workers would act collectively at the local level, in line with the spirit of associationism. To varying extents, they set up funds that would serve as insurance for new risks, such as work accidents and unemployment. These distinct working-class risks were investigated in factory law and social insurance commissions appointed in the 1870s and 1880s. The question, then, was whether employers, with or without state encouragement, should join in the financing of these funds.

Some employers wanted to be like parents to the workers, the firm would be like a home for them as long as they were able to work (occupational welfare). There were elements here of an institutional design for paternalist capitalism. But once hit by accident or sickness (which may be unrelated or related to the work environment), employers needed state help.

Across Europe, states began to admit responsibility for a set of tasks that went beyond the defence of the territory: they had to consider policies and institutions that addressed the risks that wage earners encountered in the work situation (Baldwin 1990, 93 uses the term 'statutory generosity'). This social question was also political, since workers at the time did not enjoy full political rights, so they might well organize and threaten social order. Also in the Nordic area, we observe the first, however moderate, efforts to develop institutions of social protection. The state would support a social security net, subsidizing the workers who would also save to prepare for the new risks connected to periods when they might be without work, due to accidents, disease, unemployment or ageing. These were largely local initiatives, as neither capitalists nor workers were organized in comprehensive national associations. Basically, this was a constellation between the state,

bourgeois employers and engineers, and a working class whose organizational efforts were at an early stage.

These questions were raised in Denmark even before Bismarck. But from the 1880s, all of Europe looked to Bismarck's German model of compulsory insurance for workers organized along occupational lines: sickness in 1883; accident in 1884; old age and disability in 1889. This also inspired the Nordic commissions in the mid-1880s. In the following, I briefly survey the various early social protection schemes, with unemployment insurance added to Bismarck's triad.

As for sickness insurance, Sweden (1891) and Denmark (1892) granted subsidies to existing voluntary sickness funds. This was also proposed at the time in Norway, but not passed. The model was an English one, supporting already existing (collective, local) self-help efforts. While Sweden and Denmark had many such voluntary funds, there were fewer in Norway. Thus Norway later (1909) chose the Bismarckian model of state-organized compulsory insurance.

Similarly, in the case of accident insurance, Denmark (1898) and Sweden (1901) established voluntary, employer-financed accident insurance laws; while Norway (1894) again chose the compulsory, Bismarckian version; and Finland (1895) a semi-compulsory one (Kuhnle 1981, 401f.). These schemes were restricted to the working class (sometimes even to only the most accident-prone groups among the workers), fitting the framework of paternalist capitalism.

As for unemployment insurance, the background was that any worker who lost their wage would soon become poor. The first discussions about social protection of the unemployed considered them in light of the much longer experience with the rural poor. As peasants were represented in the political system, their experience was that they had to carry all expenses when support was granted to the rural poor. In Norway's 1863 poor law, the able-bodied did not deserve assistance. According to the iron law of wages, able people had to work for the wage offered. Poor relief would only bid agricultural wages up. This rural experience clashed with the experience of the new working class, risking involuntary unemployment due to unfavourable business cycle movements. In Norway (1900) and Sweden (1918) revised poor laws offered work at low wages in public workhouses.

Schemes reflecting the experiences of unemployed workers in heavy industry developed in the field between political parties and labour movements. There were two models. The Ghent model was like the sickness funds: voluntary, union-managed funds were supported by the state, mostly administered together with public labour exchanges (Hatland 2013, 131). The alternative model was Britain's 1911 system of compulsory, state-financed unemployment relief. The Ghent model was the first choice in all the Nordic countries. It suited the labour unions, which had already begun to organize funds on their own, but appreciated state support as funds were vulnerable in economic downturns and periods of financial instability. The system was established in Denmark in 1901, in Norway in 1906, and in Finland in 1917. In the next period some interesting differences evolved, as I shall show below.

Finally, I turn to age insurance, which in later developments would be the most important type of insurance. Bismarck's triad of early social security arrangements did not include unemployment relief, but it did include (old-age) pensions. Comparing Denmark, Sweden and Norway, there is no convergence, and the pattern differs from the sickness, accident and unemployment schemes. In 1890, Iceland was the first Nordic country

to establish old-age pensions, but it was a very weak system, just a somewhat more legitimate system of poor relief. It was paid for and organized by local government. In Norway, liberal politicians held on to a Bismarckian approach in which the state would introduce compulsory insurance. Denmark and Sweden deviated; in 1891, Denmark introduced a system that the Norwegian liberal and peasant elites rejected: a compulsory, tax-financed system. Unlike any Bismarckian system, it was not restricted to certain working-class groups. It was universal, relating to the whole social formation, not just to the specific capitalist relations between labour and capital. Any citizen could potentially receive it, dependent on a means test. In 1913, Sweden passed a similar scheme that was even more explicitly universal.

In the post-war period, under different political constellations, means-testing was abolished, making Nordic old-age pensions universal. Thus, the potential universality of these early schemes started a path-dependent development. According to Baldwin (1990), it was the result of farmers pursuing their interests in the pre-democratic parliaments. He also notes that this was long before the (post-war) era of progressive income and wealth taxes. The basis of state finances was the central state's indirect consumption levies. Poor relief, which was organized at the local level, was underwritten by local land taxes, paid only by farmers and peasants. Discussions on tax and welfare reform brought major class interests to the fore, and peasant politicians hoped that a system which included the rural poor under a universal, means-tested system would imply savings on land taxes, since it would be financed by state levies. Since they feared being trapped as distributional losers, peasant politicians pushed for a universalist, tax-financed, non-contributory old-age pension system. To Baldwin (1990, 93) this is the 'cornerstone of the unique Scandinavian welfare edifice', and the Danish decision (1891) was certainly taken at a time when labour interests hardly had a strong representation in Danish political institutions. Baldwin claims that the Swedish 1913 scheme can be explained in the same way.

All these systems were means-tested. The low benefits accrued only to citizens whose income was demonstrably under a poverty line. Those who received poor relief were not covered. Note also that ageing was a limited problem. Life expectancy of males at the age of 20, by 1900, was roughly 45 years, except for Finland, where it was 42 (Flora 1987, 98 f., 105 f.). None of these early age-pension schemes were much more than a less stigmatizing poor-relief system.

Apart from this, the other early cases of social protection – also with low benefits – targeted workers specifically. To the extent that working-class organizations were involved, they were junior partners. They had more to say regarding unemployment relief, since by the end of the period their position was stronger.

The working-class-related cases of social protection can be seen as institutional designs implying complementarity between state-sponsored social insurance schemes and employer–worker relations at the firm level, in matters such as wages and working conditions. I hypothesize this as a major elite offensive, starting during the great depression of the 1870s–1880s, continuing into the *belle époque*, the new economic upturn that started ahead of World War I (WWI).

The early universalism of the old-age pension arrangements in Denmark (1891) and Sweden (1913) was less compatible with the paternalist approach to labour relations. Peasant influence (Baldwin 1990) was here due to the role that these groups had gained in local and national politics, thanks to mobilization since the earlier period. In

macroeconomic terms, these old-age pensions were surely unimportant, but they marked a turning point, since in the longer term – especially in the early post-war period, as will be seen – the remaining working-class-related pensions were made universal, too. Only unemployment insurance was organized differently, as I show below. Social protection went through several phases, located at various points on the historical time line. The laws would be revised, extending coverage (for example, of types of accidents and diseases) and eligibility (groups eligible for relief), also stepping up benefit levels. The various branches of this social safety-net were administratively coordinated to ensure efficiency. In my analysis of post-war embedded capitalism, I shall discuss the peculiar influence of labour parties and of inter-Nordic learning on the universalist pensions.

At the end of this period, and into the first decades of the twentieth century, mobilization was broadened, consolidating the major political institution of parliamentary democracy. This became the era of big and well-organized popular movements: the temperance movement, the free church movement, the youth movement, the sports movement, the women's movement – in addition to the labour movement. They differed in most respects, but agreed to one common goal: universal voting rights. When that goal was achieved, they split along party-political lines (Soulinna 1981, 604f.). First male, then universal suffrage was established right at the threshold of the next period. The next section will show how universal suffrage, the core of mass politics, and parliamentarism, became the crucial political framework for twentieth-century developments, particularly in the areas of social protection and social partnership.

CAPITALISM WITH FRAGILE DEMOCRACY, 1910s TO 1940s

As noted in connection with Table 29.1, the periodization in terms of new techno-economic complexes does not work for the interwar period. Economic problems in a fragmenting world economy led to the breakthrough of a new techno-economic paradigm (Fordist mass production and mass consumption) in the US only, while Europe was hampered by institutional inertia and persistent social tensions. Certainly, after 1917, we find a consumer culture spreading in Norden too, but mainly in the upper layers of the middle classes.

The extension of the railway infrastructure reached its peak in this period. Maximum railway infrastructure (in kilometres) was reached in Denmark in 1930, in Sweden and Finland in 1939, and in Norway in 1960. Sweden peaked at roughly three times the range (in kilometres) compared to the others (Mitchell 1978, 315ff.). Only in Iceland, with no railway infrastructure, was a modern infrastructure developed entirely for automotive transport. In the other Nordics, cars and lorries became an alternative to railway transport, but the real improvements of that infrastructure happened in the post-war period.

As for the development of the core sectors (heavy industry) of Nordic capitalism, the contraction of world trade caused grave trouble for the small, open economies. Many firms were already vulnerable because of the financial instabilities during the 1920s deflation. I cannot here provide an overview across countries and sectors, but will just note that in some sectors, exports did keep up even under the difficult circumstances in the 1930s. The years of protectionism were also years of escalation towards a new world war. Most of the successful exports were directly or indirectly defence-related products, based

on strategic raw materials (metals). This was possibly of greatest importance to Sweden. Furthermore, given the rise in protectionism, some amount of import substitution also played a role.

Within the heavy engineering complex, one new feature was the development of a furnace sector based on hydro-electricity in Norway after 1905. In Sweden, the engineering firm SKF expanded spectacularly, producing its patented 'spherical, double-rowed and self-regulating' ball-bearing (Schybergson 2001, 117). Soon the firm had subsidiaries in Germany, France, the United Kingdom, and even in the US, where in 1923, it received a huge order from Ford for ball- and roller-bearings. With this latter subsidiary, SKF became an integral part in Fordism's early breakthrough in the US. It was SKF that provided Volvo with production facilities and capital. In 1935, Volvo became independent, the first big Swedish firm to produce cars, a main feature of Fordist mass production and mass consumption. None of the others developed car production. The great depression created big problems for SKF as a producer of business-to-business products, but still, its share of the entire world market (ball-bearings) in 1934 was nearly 20 per cent, and it had 70 per cent of global exports, enjoying huge demand from the armaments industry (Schybergson 2001).

From the earliest years of this period (strictly speaking, 1906–1945), the institutions of parliamentary democracy established new rules of the political game (Table 29.1, column 3). Parliamentary democracy was not a Nordic peculiarity; my focus here is on how this set of political institutions in this period became a framework for the co-evolution of social protection and social partnership in the Nordic area. The dates for universal suffrage (arranged from first mover), male suffrage and parliamentary rule, respectively, were: Finland 1906, 1906, 1919; Norway 1913, 1898, 1884; Denmark 1915, 1848, 1901; Iceland 1920, 1915, 1904; and Sweden 1920, 1909, 1917. There are interesting timing differences here, but I only have space to discuss the Finnish case.

The striking position of Finland as first mover has been thoroughly analysed (Alapuro 1992; Fryklund and Peterson 1981). By the turn of the twentieth century, structural changes in a poor agrarian society with an expanding forest industry block had led to strong polarization. On one side, the rural and urban proletariat were joined in the social-democratic party from 1899. On the other side, most of the agricultural freeholders allied with the Finnish ruling class of bureaucrats and industrialists.

Due to the instabilities in Russia, and given the strong Finnish nationalism, Finland experienced a dramatic, once-off democratization. Universal suffrage was effective as of the 1907 election; the second country in the world after New Zealand (1893). The social democratic party gained 37 per cent of the votes, emerging as the largest socialist party in Europe. In the period 1907–1917, class struggles interacted with the struggle for national independence. The collapse of the Czarist regime in the Russian Revolution of 1917 was the external impulse Finland needed to gain national independence. But the underlying polarization exploded in a vicious civil war between the reds and the whites in the first months of 1918. The victory of the whites (many reds died in prison camps) put its stamp on Finland's interwar developments. In this respect Finland is an extreme case, one that displays developments that were more easily countered in the other Nordic states. Still, despite this extreme position, parliamentary democracy did survive. Finland, like the other Nordic states, emerged in 1945 as a country that would catch up, developing more similarities with its Western neighbours.

In all the countries, the period is characterized by a back-and-forth movement in which the labour movement challenged the old elites. By the end of World War I, the various state elites were combinations of older, bureaucrat layers; more recent bourgeois politicians with links to the most important industrial sectors; and some groups representing the dominant social movement of the mid-nineteenth century (peasants and farmers). The elite (state and employer) offensive of the earlier period had implied an institutional design that would block autonomous working-class mobilization and wage-bargaining with reference to workers organized across many firms. Through the interwar period, it turned out that this paternalist institutional design could not co-evolve with the institutions that were formed as working-class mobilization created relatively autonomous organizations across firms within the framework of parliamentary democracy. It proved impossible to restrain worker mobilization by tying workers to particular firms and undermining the formation of their own parties by establishing specific welfare arrangements accruing to distinct occupational groups (the Bismarckian roots of the German or Continental welfare state; Esping-Andersen 1990). Worker mobilization became autonomous, relatively homogeneously across sectors.

This was not a smooth, but rather a conflictual process. Elements of the preceding elite offensive (paternalism) were relaunched, but they were encountered by extensive mobilization from below. Only at the end of the period, just before World War I, do we find indicators of major changes in the two main areas. In social partnership, the employer strategy of decentralized, firm-specific wage bargaining had been weakened (but there are main national differences). In the area of social protection, some of the countries saw changes that pointed towards more emphasis on universalism. Strong complementarities, however, were not forged before the end of World War II. While Finland was the extreme, four general features of the interwar turbulence can be distinguished.

First, this was the infant phase of parliamentary democracy. The parties and organizers engaged in various compromises and alignments, pursuing shifting strategies before – in the late 1930s – the various party systems ‘froze’ (Rokkan 1970). By that time, the old liberal/conservative parliamentary division had been replaced by a socialist/non-socialist division. Second, international developments influenced political institutions: World War I ended in the Russian Revolution (February and October 1917), in the very country that Finland was a part of. Russia had traditionally been feared in the region, especially by Sweden. Thus, just as the labour and social-democratic parties entered into the game of parliamentary politics for the first time, the labour movement also had to grapple with complex internal strife on the strategic questions of reform or revolution. Third, a brief post-war boom was followed by economic crisis (1921–1922), and recovery from this crisis was hampered by the then hegemonic British international monetary policy: return to normalcy, defined as the pre-war gold standard parities. Fourth, political and economic destabilization also led to mobilization on the right-wing side. The five Nordic cases can be compared with reference to these four properties.

First, degrees of fragmentation on the non-socialist side, and the role of autonomous parties for both farmers and workers (with no clientelist ties to fragmented elites, with the exception of Iceland) differed. The string of tense encounters and realignments in the infant parliamentary system brought representatives of the most recent mobilizing class, the working class, into government positions. Denmark and Sweden had long-lasting labour (minority) governments in the early 1920s, while this only occurred in Norway

as of 1935. In the 1920s, these parties were not in a position to influence class-struggle tactics (such as many local strikes) at the shop-floor level. Such actions were also supported within an autonomous worker public sphere. In Finland and Iceland, the party systems were split 50/50 between communists and social democrats, and the latter only managed to be weak partners in coalition governments. On this basis, one can further analyse the agrarian-labour parliamentary alliances that emerged in the mid- and late 1930s (Mjøset et al. 1986, 53–64).

Second, the significance of revolutionary impulses differed, with Norway and Finland as the most pronounced cases. Norway's Labour party did become a member of the Comintern, but only from 1919 to 1923. Labour parties only considered parliament an area for propaganda; they actually shared the bourgeois parties' conviction that there were no alternatives to balanced budgets. In Finland, moreover, communists were more or less excluded from politics for long spells. With differences in timing, however, the labour movement went through various learning processes. On the whole, it arrived at the reformist position: there were gains to be made for the working class within capitalism. The labour movement then tended to claim that when it captured an absolute majority, privately owned firms could be socialized. The economic miracles of a planned economy would supposedly reproduce this parliamentary majority in the long term, leaving democracy intact.

Third, an economic situation marked by dramatic debt and unemployment problems, created due to deflationary monetary policies, proved a fertile ground for such learning. The concrete problems differed: Finland did not return to pre-war parity (devaluing in 1925–1926 to 13 per cent of the 1913 parity). Iceland left the gold standard early and devalued in 1927. Sweden had a short way to go before officially reaching pre-war parity in 1924. Norway and Denmark were the worst off, with protracted deflationary policies lasting to 1926 (Denmark) and 1928 (Norway). The dismal economic performance led to dramatic bursts of support for the labour parties. The weak upturns of the later 1920s were soon strangled as the world economic situation deteriorated. The US had gained greater impact on the world economy, and the Wall Street crash of 1929 had repercussions in Europe. Britain departed from gold on 9 September 1931, establishing protectionist imperial preferences in 1932.

Fourth, infant parliamentary democracy was doubted not just by the revolutionary left, but also by right-wing groups, some of which were fascist. The partial gains made by labour caused some intellectuals to embrace populism and even fascism, claiming that parliament should be transcended in favour of benevolent right-wing authoritarianism that would put an end to 'bolshivism' and 'trade-union monopolism'. Many groups and parties in Finland supported the fascists through the short Lappo period between 1928 and 1932 (Alapuro 1980). Among the various party-forming groups there were other processes of divergence and realignment. By the end of the 1930s, somewhat permanent party structures were 'frozen'.

As economic problems (unemployment, deflation, debt) multiplied in the early 1930s, labour and agrarian parties learned to cooperate. Labour gave up its ideas about class struggle at the firm level, as well as the belief that only fully socialized business could be managed. Labour also appealed to the farmers' and peasants' party via an ideology of the 'people's home'.

Labour party intellectuals discovered that they had support among a growing

contingent of 'Keynesian' economists, willing to commit their mathematical and economic skills to the goal of planning mixed economies. The connections were forged before WWII, although the practical consequences of the Stockholm and Oslo schools of interwar economics followed only in the post-war period, the era of economics expertise.

The labour parties realized that they could not field a majority of their own, but the advice of economics experts indicated that state support that eased the burden for indebted small farmers could benefit economic recovery as it stimulated effective demand. The result were various parliamentary alliances around economic policy offensives under labels such as 'the cow trade' (Sweden 1933), the Kanslergade compromise (Denmark 1933) and the alliance generating the 1935 Labour government in Norway (Mjøset et al. 1986, 60f.). Above all, they involved support to ease the burden on debt-ridden farmers. Here was a link back to earlier phases of labour mobilization, marked by fruitful collaboration with associations originally linked to peasant mobilization: co-operative, temperance and revivalist movements.

This chapter has traced the development of a layer of social-protection institutions, mediating between economics and politics. As we have seen, they were top-down efforts to deal with the worker question, aiming to conserve social order. As social security arrangements they were weak, means-tested with low benefits. By the late 1930s, however, the social democrats in Denmark, Norway and Sweden had begun to establish their cadre as new elements in the elite. The presence of strong, autonomous labour parties came to play a crucial role in the extension of social protection to new items, improved benefit levels, and universalization as means-testing was terminated. This influence is clear-cut, despite the fact that most of the decisions were based on broader parliamentary majorities than just labour and farmer parties. As for Norway, sickness insurance was extended to cover fishermen and sailors, and a means-tested old-age pension was introduced in 1936. Benefit levels were significantly increased. This was the largest extension of social insurance coverage in Europe since Bismarck's laws from the 1880s (Kuhnle 2013, 171f.). In the post-war period, this trend was even broader and stronger.

As for unemployment insurance, I have noted the Ghent system (Denmark 1901, Norway 1906, Finland 1917): voluntary insurance managed by the unions, with state support. But Sweden was a latecomer, maintaining (even under several minority Labour governments) its stigmatizing relief-work system with very low compensation levels. The Ghent system was introduced in Sweden only in 1936, the same year that it was introduced in Iceland. Strikingly, Norway abandoned the Ghent system that same year, switching to the British system: a compulsory, fully state-financed system for all wage earners.

We see here the start of a process in which earlier, weak paternalist arrangements are replaced by social protection institutions enforced through broad parliamentary alliances with worker and farmers' parties as main pillars. In parliamentary democracy, their strength of numbers was translated into decision-making power and control of the administration. Among the fragmented non-socialist parties there were always some non-socialist parties that would vote with the centre-left, or they just ceded to the parliamentary majority.

Turning now to social partnership: despite considerable differences between the countries, firm-level, decentralized encounters between labour and capital began to be replaced by routinized negotiations. These two well-organized and autonomous social

partners of the Nordic capitalist systems countered each other in civil society, signing 'main agreements' that served as labour-market constitutions. The timing varied: Denmark's September settlement took place in 1899. In Norway (1907) and Sweden (1905), employers and unions in the metals and engineering (leading) sectors entered into sector-wide agreements. In the late 1930s, Norway's main agreement was signed in 1935, and Sweden's (Saltsjöbaden) in 1938. In Finland, such an agreement was blocked by employers, in continuity with the civil-war polarization (Nilsson 2001).

Such frameworks securing collective bargaining were a main institutional novelty, developing through the period, simultaneously with the parliamentary back-and-forth adjustments and the debt and unemployment problems periodically hampering the economy. Nationally distinct developments can be specified by means of the categories I have referred to here, but it would take too much space.

There were significant variations in the timing of the turn to reformism, in the mix of national and international factors behind the economic problems, and in the strength and timing of social partnership and social protection upgrading. However, in all cases, parliamentary democracy survived, with state-society relations marked by what Evans (1995) describes as 'embedded autonomy', open to further mobilization by social movements. In Finland, conditions for such survival were often bleak. Although narrowly political, a red-green, agro-labour alliance emerged even there in 1937. Its economic underpinnings were weak; collective bargaining was only agreed in 1940 and effective in 1943. This meant that social partnership was accepted by Finnish employers only during war-time emergency, at a time when the 'great Finnish' right-wing authoritarian and militarist elite segment took Finland on a dubious wartime adventure. The government sought revenge for the USSR's 1939 winter war conquest of strategic parts of Finnish territory: it attacked the USSR in 1941, a Finnish parallel offensive to Hitler's eastwards Operation Barbarossa. A fragile balance between the social partners was not reached until the peculiar realignments that took place as Finland switched from German to Allied orientation in 1944-1945. As will be seen, this placed Finland in a peculiar situation during the Cold War.

We have seen that the period was marked both by economic turbulence and political polarization, as well as difficulties in the relations between economics and politics. There were only weak complementarities between the three institutional novelties I have discussed. The first, parliamentary democracy, introduced a whole new context that may be modelled in power-resource theory. The second, social partnership, implied the development of collective bargaining with different timing and coverage. The former related to politics, the latter to the economy and civil society. The third, social protection, mediates between politics and the economy. It consists of designs by the state to sustain social order by politically induced regulation of the economy.

As noted, the decentralized paternalist arrangements about to emerge in the earlier period did not survive. What started as a one-sided attempt by employers (assisted by the state) to develop institutions that would facilitate paternalist integration of the working class, by the end of the period had been transformed into a quite different social partnership pattern in which two labour-market partners faced each other as autonomous collective actors. The formerly inferior social partner had gained equality, thanks to masses of votes gained in democratic elections. Thanks to parliamentarism these votes could be translated into legislation on social protection that could potentially balance the

bourgeoisie's control over capital. There was no easy consensus, but both collectives were able to learn from the conflictual process.

By the late 1930s, at least Denmark, Norway and Sweden were predisposed for strong complementarities. Such a development, however, was interrupted by WWII. Like WWI, it yielded further experience in planning, although under emergency, and at least Norway and Finland had extensive war damage.

POST-WAR INTERVENTIONIST CAPITALISM, MID-1940s TO MID-1970s

US post-war hegemony stabilized the Western (or Atlantic) world. It had two basic elements. The geopolitical element was the Cold War. The economic feature was the Western area as the extended market for products and technologies in which the US had developed excellence before and during the fragmentation of the world economy in the preceding period. This implied the diffusion of the Fordist techno-economic paradigm, a model of economic growth in which productivity-indexed real wages connect assembly-line mass production with consumerist mass markets.

As the international system was restructured along a Cold War axis, the Nordic countries thrived. In the new strategic situation they had different geopolitical preferences: the western Nordics, Denmark, Iceland and Norway, joined the North Atlantic Treaty Organization (NATO). The eastern Nordics stayed neutral. These different preferences precluded deep regional integration, but the reality is that all five became integrated in the Western world; even Finland, with a lag. In this setting, they successfully implemented a set of low-key regional integration measures (Wendt 1981): a passport union (1952) and a common labour market (1954).

Cold War geopolitics influenced the way in which the US exercised its world economic hegemony, particularly in the crucial international regimes of trade, money and technology. Since the Eastern bloc was to be contained, these international institutions were organized along the lines of what has been called 'embedded liberalism' (Ruggie 1982). While US international economic policies at the time were torn between earlier isolationist ideals and more recent liberal visions, the actual strategies pursued did not require its Western European allies to liberalize right away. In the Cold War, the US needed allies with stable political economies. This was all the more challenging since there was urgent need for reconstruction due to wartime physical damage and economic disruptions. If that required accepting the mixed economy preferences of most left-liberal groups in the area, the US accepted this. As part of post-war reconstruction, the Western European countries were allowed to pursue infant-industry protection, while the US supported technology diffusion to Western Europe. The US could spend some of its surplus as aid by which the Europeans purchased US export items. Politically, this would integrate the working classes and consolidate reformist and/or Christian democratic labour parties. Although the Western European states were markets for US goods, they were primarily Cold War allies. They were not seen as competitors, and they were given access to technologies that would – in the long run – enable them to catch up economically with the leading US economy.

The Atlantic economic system thus embedded its liberal features in a number of

international institutional features such as a framework of fixed exchange rates, managed international payments (Bretton Woods) and only gradual trade liberalization (the General Agreement on Tariffs and Trade, GATT). This system affected the neutral, eastern Nordics (Sweden, Finland) as much as the NATO members. This international institutional framework suited the Western-European countries well. As for the Nordic countries, they would be allowed to realize just the complementarities that were there in embryo stage in the late 1930s.

This Cold War context facilitated the productivist style of reconstruction and catch-up, fuelled by diffusion of leading US technologies. The Nordic countries adopted the latest techno-economic paradigm, the mass production, mass consumption, oil-based paradigm, 'Fordism'. In Norden, only Sweden – with its iron and steel sector – had the industrial preconditions to develop an automotive industry (Volvo, Saab). They also relied on further raw materials exports to gain foreign-exchange incomes that financed imports both of sophisticated investment goods and items of mass consumption. This was also facilitated by Marshall Plan aid and US-led payments arrangements.

This was particularly so with Denmark, Norway and Sweden, the countries in which social democrats had become influential even before World War II. Iceland had thrived with Allied bases and high economic activity during the war, but like Finland its social partnership institutions were more burdened by conflicts than in the three other cases. But, as will be seen, both countries also caught up. In the case of Finland, war reparations, elite realignments and national unity following dramatic policy shifts towards the end of WWII led to convergence with the three others in the medium term. Both Iceland and Finland had capacities to counter whatever peripherization pressures emerged during this Golden Age.

Throughout the 1950s and 1960s, the five countries took part in the overall Western European catching up with the leader (the US). They sustained and developed their own national systems of innovation, serving as modules in a larger Nordic and West European Fordist division of labour, nourished by US technology transfers. Rather than broad mass production, the small Nordic economies gave priority to certain selected sectors and excelled in certain specific skills.

We have seen how institutions of social protection and social partnership emerged in the interwar period, but they did not really co-evolve to become complementary. Under Cold War 'embedded liberalism' conditions, they came together, co-evolving with upgraded institutional features of other vintages, notably capacity institutions and openness to mobilization. At least in the social democratic Nordic states, a new elite had blended with the older elites since the late 1930s, representing a broader stratum of the population. Various organic intellectuals had been part of working-class mobilization, so in addition to the most crucial working-class leaders, a number of intellectuals (lawyers, engineers, economists) were ready to work with and within the new administrations. The Cold War system of strong complementarities was a result of their elite offensive.

A new institutional feature was social and economic planning based on expert knowledge. It was not so much a question of new organizations, but of new professions taking important positions in the administrative apparatus that had earlier been entirely dominated by lawyers. A wider spectrum of professions was now engaged in the planning and management of Nordic capitalism, most importantly engineers and economists. They helped to develop interventionist capitalism, beyond non-interventionist 'rule of law'. In

addition, for some fields – particularly the health sector as part of state-provided social protection – voluntary organizations played important roles (Stenius 2010). They possessed valuable applied knowledge, knowledge that was later to be codified in new health professions. Together with older professions, these groups were crucial elements in the growing new middle classes.

Ever since the coming of heavy industry, engineers had been involved in private managerial hierarchies. Now they also had a say in national planning of upgraded physical infrastructure and heavy industries that would earn export incomes. Economists related both to social partnership (modelling applied to income-policy settlements) and social protection (developing a national accounts system, modelling fiscal policy strategies). Both professions focused strictly on the growth of the real economy. Monetary policy was subordinate, a key point in the Bretton Woods system. Well into the 1980s, financial capital was repressed to conform strictly to the needs of the production economy (Andersen 2010), which is Perez's (2002) criterion of a 'Golden Age'.

In line with the late 1930s 'labour-market constitutions', varieties of coordinated wage bargaining became routine. Bargaining would be more or less centralized, but always also allowing for local-level negotiations in which the actual market conditions of the firms were taken into account. Owners of capital retained their prerogatives in terms of investment decisions and work management, but even in these fields, sets of regulations were imposed.

Liberals, guided by ideals of the self-regulating market, had feared that such state intervention would undermine existing complementarities. Some of them even held that the planning experiments would collapse into authoritarian rule. They understood that democracy had brought labour into power, but did not trust the reformist turn, fearing that parties of the working masses would turn democracy into authoritarian rule on a 'Bolshevik' model once they were threatened. More moderate liberals feared that economic planning would impair the capacity to adapt flexibly to world-economic changes.

Reformist labour, in contrast, insisted that their mission was to deepen democracy: political democracy would be followed by social democracy. The strike as 'non-democratic' class struggle was replaced by a democratic class struggle in which full employment and welfare measures such as health, social insurance, pensions and education would benefit the broad, working masses, thus reproducing and strengthening political support for the reformist labour movement (Korpi 1983). Even elements of economic democracy, such as co-determination on the shop-floor level, would be implemented. Such measures would spur economic growth.

The mixed economy combines three channels or agendas for discussion of various types of issues. First, the parliamentary agenda is the main democratic arena, a forum for issues pursued by the parties of the established, 'frozen' party system. Second, the corporatist agenda is a number of councils, committees, hearings and consultative routines through which the state apparatus involves the social partners and other organized (interest-based or voluntary) groups. These groups may all employ expert advice based on various professions. Third, there is the more loosely defined arena for social movements mobilization, through the public sphere, addressing issues that are marginalized in the two other channels.

In retrospect, the mixed economic system planned by engineers and economists – balancing private pursuit of profit with regulation for fairness and equality in line

with social-democratic reformism – was managed quite successfully. Both physical and welfare-state infrastructure was extended. Political support was sustained by alliances. Between the 1930s and the 1950s, the alliance with the poorest strata of farmers was crucial. But due to policies for increased agricultural productivity, structural change caused this social stratum to diminish. The agricultural share of the labour force dropped below 30 per cent in these years: Denmark in 1935, Sweden in 1940, Iceland in 1943, Norway in 1948, Finland in 1963 (Mjøset et al. 1986, 336 f.). The new middle classes in both public and private organizations grew. At the parliamentary level, Labour's alliance strategy shifted towards these groups in the 1960s (Rokkan 1966). Competing for the votes of the same groups, the larger parties grew more similar.

In Sweden, Norway and, to some extent, in Denmark, social-democratic parties dominated government for long spells, while the non-socialist side was fragmented. Whenever some non-socialist coalition government took over, a 'Weberian' bureaucracy – typical of non-clientelist systems – remained in the ministries, and these experts ensured continuity. Liberal critics were in a weak position. In Iceland and Finland, the networks between experts, government, administrative apparatus and political parties were weaker, and certain business sectors had considerable power, complicating peak-level social partnership (Mjøset 2011a, for a comparison).

Iceland and Finland thus had different economic policy models. Both have institutions of social protection (but mostly lagging compared to the other three), and they participate in Nordic cooperation (Finland was often late in joining). Social-partnership institutions had not changed as much, compared to the early interwar period, as in the other Nordic countries. The new profession of economists thus met with more resistance. In Finland, the Central Bank played a more important role than in the other three. In Iceland, an independent Central Bank was first established in 1961; the economics profession was weaker, so judgements by politicians and leading-sector business interests (fisheries) played a larger role.

In Finland, the Cold War had peculiar implications. As a consequence of the drastic 1944 reversal of the 'parallel war' against the USSR, Finland both had to pay reparations and to resettle 430 000 refugees from the south-eastern region that was absorbed into the USSR. A treaty of friendship and cooperation with the USSR restrained Finland's international relations, particularly in the early post-war period. The bourgeoisie had to adjust to this new situation, and earlier left-wing working-class associations were reintegrated into Finnish policies. But despite the close friendship with Russia (geopoliticians even invented the term 'Finlandization'), Finland became part of the Western catching-up process, producing sophisticated goods to Western markets and more elementary industrial input as reparations to the Russian market. Over the first post-war decades, however, Finnish labour relations remained quite confrontational, with several strikes and lock-outs.

The fact that the party structure in both Iceland and Finland included significant splits on the socialist side (communists versus social democrats) is part of the reason why they had less stable institutions of social partnership. The failure to agree on class compromise-type income policies tempted the authorities to use an easy instrument such as devaluation, then having market forces do the job. The result was devaluation cycles with considerable instabilities (Mjøset 1987, 416). They exploited the Bretton Woods option of claiming devaluation for real economic reasons, being too small to matter.

Devaluations pushed up inflation, and real wages slumped. This was countered in the next phase of the cycle by high strike activity as workers took action to regain these losses. Also fiscal policies were more in line with the austere treasury view (particularly in Finland), which implied less funds for fiscal spending for social protection institutions. The complementarities of these two countries were different from what went on in the three other countries. As will be seen, Finland eventually converged, while Iceland remained different.

Compared to the various offensive mobilizing patterns of the 1930s, the post-war Nordic 'labour-dominated' states managed economy and society from above. But unlike the late nineteenth century, the situation was not one of older or more recent wealthy elites in a non-parliamentary political system (except Norway) marked by voting restrictions. There was full democracy. In the three social-democratic cases, representatives of the working masses held office over long spells of time. Even in Iceland and Finland, they were sometimes included as weaker partners in coalitions. State intervention was 'mobilization from above', extending citizens' rights by legislation. This required that the staffs of the administrative apparatuses grew, but not in the unproductive ways which are typical of clientelist political systems.

Sound management of economic development secured compatibility between industrial restructuring and the further consolidation of a universalist social protection, financed by high taxes, centred on progressive income taxes. There was broad consensus on these institutions. Their legitimacy was bolstered by progress in living standards, which due to redistribution worked in favour of the broad strata with low incomes. In this period, institutions of social protection were broadened in terms of the groups covered, and benefits were made more generous. For instance, sickness insurance was generalized for all citizens in Sweden in 1955, in Norway and Iceland in 1956, in Denmark in 1960, and in Finland in 1963.

Old-age pensions emerged as the most important field of social protection. Especially when improved health conditions would generate a secular rise in life expectancy, this became the most expensive part of social insurance. A main turning point was the Swedish 1946 decision under a Labour party majority to make old-age pensions independent of a means test. With a lag, the other systems were generalized in the same way: Norway and Finland in 1957, Denmark in 1964, and Iceland in 1965. This established universal flat-rate benefits (people's pensions) in all countries, a modest citizens' wage for the elderly.

While all the earlier social protection institutions had focused on providing basic security and poverty alleviation (first tier), the next step in the development of these institutions was politically connected to the relative growth of the new middle classes. It was impossible for the reformist left to pursue a policy of strict income equalization; as little as they had earlier been able to go for full socialization of production. A measure of income inequalities after retirement had to be accepted, depending on the actual living standards, differential lifestyles and the position in the social hierarchy enjoyed by various groups. Although redistributive, the Nordic models had to sustain social stratification. However, in line with the equalities already involved in the generalization of freeholder agriculture, the hierarchies were flatter than in most other varieties of capitalism.

Privileged white-collar groups were able to gain guarantees for some kind of income maintenance after retirement (second tier), granted by their (public or private) employees.

In Sweden, *Landsorganisasjonen* (LO) early on demanded similar social concessions for all its blue-collar members. The result was a long and hard struggle over compulsory, state-organized, income-related supplementary (labour-market) pensions for all wage earners. With a one-vote parliamentary margin, the Swedish Labour party won in 1959. This reform then became a model for the other countries. In Finland (1962) and Norway (1967), the non-socialist side had observed the success of the Swedish solution, and consensual compromises were reached (Edling 2006). In Denmark, there was strong resistance from non-socialist parties, but even disagreements within the labour movement. The Labour party was also weaker in parliament. Thus, the universal people's pension was improved, but supplementary pensions were left to the private sphere. A similar outcome followed in Iceland. However, in Denmark, these earnings-related pensions were instead integrated into collective agreements, 'a very collective form of privatization' (Goul Andersen 2011, 4). For this reason, the Danish system did not differ all that much from the Swedish system.

Unemployment insurance, as has been seen, differs from these pensions. I have noted the prevalence of the Ghent system in all Nordic countries, except for Norway. This contributed to the high rates of union density in the region, somewhat lower in Norway (Mitchell 1978). However, the Ghent systems were turned into functional equivalents to the Norwegian mandatory, state-supported system. Due to close political relations between union confederations and state elites, the state ended up footing most of the bill for the union unemployment funds (also providing various kinds of tax relief) while benefits were made more generous in terms of compensation and duration (Goul Andersen 2011, 16).

There is a politicized debate as to whether Nordic institutions of social protection are the result of labour's exercise of their power (based on their large share of votes in the parliamentary system), or just emerged from consensual functionalist adaptation to imperatives of industrialization. It seems clear that Swedish social democracy played a crucial role in the main institutional turning points. Consensus then often followed in other countries due to inter-Nordic learning. A research group of historians concluded that 'the political dominance of the Social Democratic forces put unmistakable stamps on the Nordic societies, even if most of the welfare measures were born out of negotiations and compromises with the non Social Democratic parties' (Christiansen et al. 2006, 351f.).

The old 'parallel system' restricted the number of pupils that could enter grammar schools, which further allowed entry into higher education. The revision of this system is an example of upgrading capacity institutions. All the Nordic countries switched to a comprehensive school system integrating both theoretical and practical education, neutral in terms of class, gender and intelligence. The years were 1962 in Sweden (nine years comprehensive education, decided in 1950), 1968 in Finland, 1969 in Norway (seven years comprehensive education 1936) and 1972 in Denmark and Iceland (Sysiharju 1981, 422–423). In this system, all pupils have a chance of choosing any further educational route. It has relatively few school tracks and few private schools (Denmark is an exception here). Schools do not differ much in terms of their capacity to teach the curricula. Such a system minimizes the effects of class background. Still, it was unavoidable that to some extent the earlier vocational/general education dichotomy was reproduced within secondary schools.

The new composite elite of labour representatives, engineers and natural scientists (some of whom had ties to the labour movement), farmer representatives and heavy-engineering business interests pursued an elite offensive under conditions of 'routinized' mass democracy. But some waves of mobilization can be discerned.

By 1976, a non-socialist coalition won the Swedish elections, ending 44 consecutive years of Labour rule. Pushed by the unions, the Labour party at that time launched the idea of proceeding from social to full economic democracy, challenging employer control over investments, breaking the balance between the social partners. This move was not successful, and as in the other cases, the mixed economy was retained.

In all countries, some of the labour grassroots were frustrated by the workings of the corporatist elite networks. But the new social movements that emerged in the 1945–1975 period were largely based on the new middle classes. Broadly speaking, these movements reflected the higher living standard and levels of educational attainment. The peace movement was an early response to the Cold War, but since the late 1960s, the feminist women's movement and the student movement flourished. The student movement tried to link up with the labour left, but it never became more than a social movement internal to the academic sphere. These activists certainly set out criticizing the expert professions, but were absorbed as teachers in the expanding mass university from the 1970s. Their main fate was to educate ever new experts to staff the administration of the welfare state and, as a side-effect, to produce smaller numbers of free-floating literary intellectuals to colour the public sphere.

The feminist women's movement became much more important. Its impact was extensive and clearly in continuity with the earlier efforts by peasants and workers. Its impact mainly came in the last period of internationalized welfare capitalism (see Table 29.1). I shall not analyse that period here, since it is of less relevance to the question of development experiences. But I need to mention the impact of the new women's movement. The major post-war transformations in education, social protection and social partnership were above all male success stories. But as educational attainment grew, one result of social mobility into the middle classes was a new women's movement that understood itself as feminist, in the sense that these gender inequalities were regarded as decisive structures that the movement set out to change. Women's caucuses strengthened their stance in most political parties. In Finland, Norway and Sweden, this led to what has been dubbed state feminism (Hernes 1987). Women brought expertise into the administration, most parties were driven by their women's caucuses in these matters, and grass-roots movements pushed from below to upgrade and change those institutions that mattered the most for the equality between the sexes in dual-income families. As revised family policies generously provided public kindergartens, maternity leave and 'daddy quotas', while provision of caring involved improved old-age homes and services, young dual-earner couples could start a family right away; there was no need to delay childbirth. This has resulted in fertility high enough to avoid population decline. In this respect, forecasts of the dependency ratio – the ratio between the population outside of the labour force and the labour force – looks less worrying in the Nordic countries than for most continental European countries, especially the Southern European ones.

At the threshold of the 1970s, Iceland and Finland still displayed social structures, political patterns and economic cycles that deviated more or less from the Danish, Norwegian and Swedish patterns. For Finland, however, there was partial convergence

from the late 1960s. Finland even caught up and converged institutionally with the Nordic majority as far as its social protection and social partnership institutions are concerned. It even became a leader in the field of capacity institutions (Castells and Himanen 2002). As for Iceland, there was less convergence, as its devaluation cycles continued. However, these two outliers were influenced by regional cooperation measures, not just the Nordic Council(s) as such (Wendt 1981), but also more specialized coordination committees in various areas. These regional cooperative and consultative networks and meetings were extended from the interwar period. There were meetings of the employers' associations (Nilsson 2001), unions, meetings of lawyers, of social policy administrators (Petersen 2006), as well as scientific networks.

While absence of clientelism is a Nordic 'rule', connected to the long tradition of embedded autonomy, there is one exception. In Iceland, clientelism peaked during the Golden Age. Public sector jobs down to the level of swimming-pool attendant were distributed on a partisan basis. But institutional change in the electoral system (proportional representation extended to rural areas, 1959) improved the position of the educated higher middle classes (strengthened by the 1960s revolution in higher education), and opposition to clientelist practices (favouring meritocracy) became part of their social mobilization (Kristinsson 2001, 185). A series of short-lived parties were formed in the 1970s, all emphasizing the ethics of government. The signing of free-trade treaties from the 1960s onwards weakened the old system in the main economic sector, the fisheries.

In sum, all five Nordic countries succeeded in promoting economic growth: they all displayed virtuous circles of auto-centred development (Senghaas 1985 [1982]), differing from structurally heterogeneous Third World countries. While Finland and Iceland may be characterized as less stable in political terms, their rates of economic growth were not lower than those in the three more stable countries. In fact, given their latecomer position, structural change was faster, as they were catching up; but fluctuations were much larger. Political conflicts did not escalate, and there was no breakdown into authoritarian rule.

CONCLUSIONS

In this chapter I have analysed the development of five Nordic cases, from poor periphery countries at the time of the Napoleonic Wars to successful twentieth-century catch-up states. I have distinguished between three stable successes (Denmark, Norway, Sweden) and two cases of late development. It is relevant to count them as Nordic, because they share some old preconditions: Protestantism, literacy, a Swedish or Danish administrative legacy. But they deviate in terms of the greater instability of their modernization processes. In Iceland, this is linked to clientelism, weaker state capacity than the other four, as well as blurred relations between the social partners, leading to an economic experience of investment and devaluation cycles. Finland had the same experience with cycles (but ending in the 1970s), but unlike Iceland it also had a legacy of stronger interwar polarization, and had to live a precarious post-war existence on the East–West geopolitical border, with a neighbour they alienated during World War II. In making this distinction between three relatively stable and two less stable development processes, the

implication is that present-day developers may learn more from Finland and Iceland (the outliers) than from the more typical Nordic cases.

The Nordic states met with a number of challenges from the 1970s onwards (see the analyses in Mjøset 2011b), but these experiences are less relevant given my focus here: what can present-day Third World countries learn, being at the receiving end of information on the Nordic development experience? This question (for a pioneering discussion, see Senghaas 1985 [1982]; Mjøset 2007) can be discussed with reference to the periodization in Table 29.1.

First, consider liberal capitalism marked by agrarian mass mobilization before mass democracy. While the Nordic states were at that time small, poor, emerging economies, they differed from most present-day small, poor, developing countries in terms of their pattern of early nineteenth-century preconditions: political and religious homogeneity, administrative traditions (quality of governance), literacy conditions, health, distribution of income and resources. A certain adjustment capacity had developed in Norden before the science-based, heavy-engineering paradigm of Perez's third surge. Their processes of social mobilization and state formation in the nineteenth century differ substantially from such processes in the twentieth- and twenty-first-century Third World (see the comparison in Rokkan 1975, 591–600).

Many Third World countries have formal democracy, and a main issue in contemporary mass mobilization is that more substance must be given to that promise. Social mobilization for equal access to education, against corruption and for broad empowerment of women (for instance: against gang rape in certain cultures) mark the agenda in many Third World countries. However briefly – and in need of further specification – I have claimed that the customary and legal position of women was more secure in the Nordic and North European realm, even when analysed with reference to a family form that evolved more than 1000 years ago. On such issues, the Nordic countries were better situated at the time they entered mass democracy.

Turning to the late nineteenth century, Nordic corporate capitalism was marked by working-class mobilization and mass democracy. A certain adjustment capacity – in the sense that literacy facilitated upgrading and proliferation of skills – had developed in Norden before the science-based, heavy-engineering paradigm of Perez's third surge. On that basis, their traditional raw materials (Sweden's iron ore, Norwegian water power, Finnish forests, Denmark's livestock, Iceland's fish) became the basis of further industrialization. These capacities – with respect to both the development of skills and the practice of good governance – help to explain how they escaped 'resource curse' problems (for the case of Norway, see Cappelen and Mjøset 2013).

A comparison with the poorer raw materials-exporting countries of the twentieth century could investigate the hypothesis that these lacked such an early, 'milder' exposure to capitalist industrialization. Many of these countries had developed as export enclaves during colonialism. During post-colonial rule, clientelism of the most penetrating kind (in the extreme: kleptocracy or failed states) became part of vicious circles in which adjustment capacity was undermined. In this context, foreign investments tend not to unleash the kind of extensive forwards and backwards linkages that emerged even in the poorest Nordic cases. Post-war developing countries became the main targets of United Nations international programmes: the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Development Programme

(UNDP), United Nations Population Fund (UNFPA) and others. These elements in the UN system can be seen as an effort to generalize the embedded liberalism of the Western European–Atlantic experience. Recent Millennium Goals have been fulfilled, but largely due to the weight of successful emerging economies. There is presently no mechanism that can be compared to the Bretton Woods system that was so beneficial to the many Western European catch-up processes in the early post-war period. Development strategies pursued by poor states, often with Western development aid, failed to counteract structural heterogeneity (Senghaas 1985 [1982]), which persisted from the colonial period. Present-day poor countries suffer from a lack of adaptive capacities, in terms of education and skills, and often problems of inefficient administration and low capacity to collect taxes, given prevailing varieties of clientelism. The state apparatuses are not trusted, and public servants have to add to their low wages by taking side-payments.

The interwar period of fragile democracy was the last phase of Nordic corporate capitalism, undermining the paternalist institutional design. Despite the turbulent situation, the conflicts did not take a destructive turn but led to class compromises: stronger in Denmark, Norway and Sweden; weaker in Finland and Iceland. Social partnership in wage bargaining interacted with the formation of regulatory coalitions in the 1930s.

Nordic interventionist capitalism secured broad legitimacy by substantially extending the welfare state as a safety-net ('people's home'), while simultaneously maintaining economic growth, based on both traditional raw materials and adaptation to structural change in the Fordist age of mass production and mass consumption. In the present state of the world economy, not even emerging economies have such properties. Their high growth rates are achieved within different sets of institutional complementarities. This complicates the transition to a less export-dependent growth model, although China makes such efforts in an urbanization process of hitherto unseen proportions, and many Latin American countries have introduced elements of a comprehensive social safety-net. But the Third World is marked by increasing internal polarization: some emerging economies are growth poles; while at another extreme there is recurrent violence in certain conflict zones, producing waves of refugees striving to enter the richer Western countries. I therefore finally consider the present world economic transition: the situation of information and communication technology (ICT) frenzy (see Table 29.1).

Emerging economies are winners in processes of unequal development. In the period of liberal capitalism, Britain (textiles and railways) was important for the Nordics. Then, in Perez's third surge (Table 29.1), Germany was very important to Nordic corporate capitalism, especially in new sectors such as electricity and chemicals. For post-war mass consumption, the Nordic phase of interventionist capitalism, the US was the leader to follow. In parallel ways, one can think about smaller developing countries in the neighbourhood of present-day emerging economies: China, Brazil, India, and others. With reference to Perez (2002), one might argue that the new techno-economic paradigm (ICT) will make catching up – developing adaption and innovation capabilities – easier than it was in the nineteenth century, at least for the countries whose labour force is sufficiently educated. The Nordic countries' catch-up started with the spread of the relatively simple mechanical technologies of textiles and railways, continuing within techno-economic paradigms based on large-scale mechanical technologies. Upgrading and revision of skills in an up-to-date educational system was crucial in this process of economic transformation. However much present-day ICT makes catching up easier, it is also the case

that small, poor and peripheral countries today may get into trouble since their options are worsened by the catch-up processes of the larger emerging economies. The experiences with China's engagement in Africa are mixed. China is desperate for raw materials and food crops (given that its arable land is a rather low percentage of the country), but it also has a flair for Japanese-style imperialism, which proved more conducive to industrialization than other types of imperialism.

The world-economic situation today is different from both the 1930s fragmentation and Cold War embedded liberalism. While no international constellation has ever confirmed liberal visions, the present situation is – relatively speaking – more liberal than the two periods through which Nordic capitalism developed from corporate to interventionist capitalism. We have no breakdown into anarchy and self-sufficiency today. The leading countries of the Atlantic sphere are eager to guard an open, liberal world economy, just as Manchester capitalism did in the days of Friedrich List. This implies that if regulatory alliances emerge in present-day developing countries, they will have to succeed in an open world economy, while the Nordic states succeeded through a sequence of not entirely open international phases: first a temporary close-off in the 1930s, a world war, and then the semi-managed Bretton Woods period.

The recent financial crisis (2007–2008) affected the world economy as a whole, but above all certain parts of the 'Old World'. Some of the emerging economies continued catching up. World trade did not break down. Today, there are plenty of 'rescue coalitions' in the rich world, but there is a lack of regulatory coalitions of the kind that served the Nordic countries well in the interwar period. Some members of the European Union, particularly the Southern European countries, suffered (and suffer) gravely.

The spectre of environmental disaster was absent when the Nordic countries emulated the US mass-consumption model. As was claimed in *Our Common Future* (WCED 1986), rising living standards in the Third World increase the risk of global warming if the mass-consumption model is emulated on the basis of the same fossil-energy regime that underpinned the Western economic transformation.

For the first time in the history of capitalism, the process of uneven development – given the broad consensus among scientists supporting the Intergovernmental Panel on Climate Change (IPCC) conclusions – comes up against some limits that are defined by the Earth as an ecosystem. Like earlier industrializers on the fossil-fuel model of energy provision, emergent economies often suffer dramatic problems of local, especially urban air pollution (smog, with a number of health risks). If any of the emergent economies are able to take the lead towards a post-fossil solution, their competitive position would improve. Hopefully, their smaller neighbours could rely on both ICT and greener types of energy provision.

These conclusions do not point to specified lessons for present-day developers. Such lessons may utilize my materials on how the Nordic economies prospered, but they must be utilized within a comparative framework and contextualized for the present period.

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30. Competitiveness and development: a Schumpeterian approach

Mehdi Shafaeeddin

The problem that is usually being visualized is how capitalism administers existing structure[s], whereas the relevant problem is how it creates and destroys them. As long as this is not recognized, the investigator does a meaningless job. (Schumpeter 1976 [1934], 84)

INTRODUCTION

The purpose of this chapter is twofold. Firstly, to show that while developed countries apply the concept of competitiveness in its dynamic sense as a means of raising the standard of living of their population, they impose competitiveness in its static sense on developing countries. Based on the neoliberal ideology, they advocate policies which lead to keeping developing countries which are at early stages of industrialization at a low level of development and industrialization. Such policies, as I will explain, tend to lock their structure of production and trade in primary commodities, resource-based industries and, at best, in assembly operations. They also create constraints on those countries which already have some industrial base, limiting their ability to upgrade their industrial structure to raise the standard of living of their citizens. Secondly, the chapter sheds some light on the policies necessary to achieve competitiveness at a high level of development and mentions constraints for achieving it.

To proceed, I first briefly refer to different approaches to competitiveness; the static approach to competitiveness is outlined, and reference is made to the views of its critics before explaining competitiveness in its dynamic (Schumpeterian) context. Subsequently, I provide my own analytical framework by considering competitiveness as a means to development where firms are the centrepieces of economic activities, and describe their relations with, and the role of, other economic actors and agents, including the government. The following section is devoted to development policies required for achieving competitiveness at a high level of development. In my concluding remarks, I refer to constraints on applying such policies.

DIFFERENT APPROACHES TO COMPETITIVENESS

The issue of competitiveness has attracted a lot of attention from both scholars and policy-makers, but with different approaches. Some have regarded competitiveness as an important element of success in economic performance (e.g. OECD 1992); others have considered it a misplaced concept and an obsession (e.g. Krugman 1994). Almost all industrial countries have been concerned with their competitiveness (at a high level of development) on the international market, particularly during the last quarter-

century. They have established competitiveness commissions, or councils, at the offices of their presidents or prime ministers. Further, in all cases government intervention in technological development and upgrading of the industrial structure and services has been their focus of attention. The content of the publication by the United States (US) Presidential Commission on Industrial Competitiveness issued in 1985 (Vol. II, 7) is one example. It advocates that competitiveness is the basis for raising a nation's standard of living and the expansion of employment; it should contribute to labour productivity, real-wage growth and real return on capital employed in an industry in addition to improving the position of the country in world trade. The Organisation for Economic Co-operation and Development (OECD) Secretariat confirms this approach to competitiveness in its study on competitiveness (OECD 1992, Ch. 11). In 2006, the Bush administration approved an extensive policy framework for technological development under the American Competitiveness Initiative with a federal budget of \$137 billion covering a wide range of activities. In a speech to the Economic and Social Council (ECOSOC) in 2007, the US representative clearly defended the need for protection of technology: he mentioned that 'technological change is driven by protection of IPRs [intellectual property rights]'.

According to the UK Government's third White Paper (1996, 10), 'Improving competitiveness is central to raising the underlying rate of growth of the economy and enhancing living standards . . . It is about creating [a] high skills, high productivity and therefore high wage economy where enterprise can flourish'. This approach is further confirmed in another UK Government White Paper on competitiveness issued in 1998, in which is emphasized the need to produce high-value goods by means of constant creativity, innovation and enhanced performance. According to the UK Prime Minister, 'Old fashioned state intervention did not and cannot work. But neither does naïve reliance on markets' (UK Government 1998, 1–2). The related framework contains a new approach to industrial policy based on four main pillars: actively seeking new ideas and knowledge; innovating new products and services; investing in the workforce; and utilizing knowledge and skills to the full (*ibid.*). In March 2000, the European Union (EU) also adopted, through the Lisbon European Councils, a strategy for strengthening a knowledge-based economy, which includes stepping up the process of reform for competitiveness and innovation by research and development (R&D), training and so on.

While I have provided a few examples, the governments of all developed countries have, in fact, applied more or less the same approach to competitiveness. Yet, developed countries have been imposing competitiveness at a low level of development on developing countries through their advocacy of neoliberal ideology – for example, the Washington Consensus – or through international organizations, such as the International Monetary Fund (IMF), World Bank and World Trade Organization (WTO), or through bilateral trade agreements. In other words, when the concept of competitiveness is applied to developing countries, it is often delinked from economic development, as though competitiveness is an end in itself. If this were the case, one could go to the extreme by arguing that everything could be sold on the international market at zero prices. Developed countries have been imposing their market-oriented approach to competitiveness on developing countries based on the theory of static comparative advantage, thus advocating the lack of government intervention, budget cuts, universal and across-the-board trade liberalization, absence of performance requirement

from transnational corporations (TNCs), and so on. Williamson, the advocator of the Washington Consensus, admits that 'none of ideas spawned by . . . development literature . . . plays an essential role in motivating the Washington consensus' (Williamson 1990).

THE STATIC AND DYNAMIC APPROACHES TO COMPETITIVENESS

The neoclassical theory of comparative cost advantage (CCA) is the philosophical and ideological base of the Washington Consensus, activities of international financial institutions (IFIs) and their recommendations for economic reform and universal and across-the-board trade liberalization in developing countries. It is also the philosophy behind the General Agreement on Tariffs and Trade (GATT) and WTO rules. According to the neoclassical theory, evolved from Adam Smith's theory of international trade, CCA is rooted in resource endowment: capital, including natural resources, and labour; and material capital is the main source of specialization and division of labour and growth.

The doctrine of CCA as applied, however, is a static theory, based on a number of unrealistic assumptions. For example, it assumes, *inter alia*, that: national and international markets are perfectly competitive and technological knowledge is freely available; experience has no influence on costs; firms, which are the nucleus of economic activities, are small and passive; there is no barrier to entry; there is no uncertainty or market failure; and products are homogeneous.

Critiques of the Static Approach

The static approach to competitiveness is flawed with certain deficiencies for both theoretical and empirical reasons. Perfect competition is an exception, not the rule, outside agriculture (Schumpeter 1934, 78–79). Most industrial firms are large and dominate the market; economies of scales and scope prevail at the level of firms and plants in most industries; and barriers to entry do exist. Further, technology is not freely available; products produced by different firms are not necessarily homogeneous; the accumulation of production over time does affect both cost and prices as experience is gained; market information is not perfect; and uncertainties and risks are rampant. Firms are different, each having its own culture, specialized skills and other specific characteristics. There are also ample sources of market failures on the product and factor markets, particularly in developing countries at early stages of their development.

Moreover, the empirical evidence indicates that some factors other than costs, prices and exchange rate are also important in competitiveness; for example, 'technological competitiveness and the ability to compete on delivery', which to a large extent depends on investment (Fagerberg 1988, 371).¹ The simultaneous increase in relative unit labour cost (RULC) and market share, noticed in the case of Japan during the 1960s and 1970s

¹ More than two-thirds and one-third of growth in market share was accounted for by technological factors and the ability to deliver, respectively, while the contribution of the RULC was slightly negative (Fagerberg 1988, Table 4).

and referred to as the 'Kaldor paradox' in the literature, is another example. In a study for the period 1963–1975, Kaldor (1982) concluded that countries with the fastest rate of growth of exports were those which at the same time experienced faster rates of increase in their RULC than others. He also concluded that in the long run relative changes in exchange rate could be the result of competitiveness, rather than its cause. Furthermore, relying on RULC alone as a policy tool for improving competitiveness was, he argued, a simplistic view.

Another empirical study by Amendola et al. (1993) indicates that changes in unit labour costs and exchange rate 'display only short-run effects on changes in competitiveness' (*ibid.*, 463). These short-run effects are, however, reabsorbed in the longer run by more significant effects of technological learning, innovations and country-specific factors, such as institutions, industrial organizations and policies (*ibid.*, 465–468). Amable and Verspagen (1995) showed that 'non-price variables', particularly technology, were also very important in export competitiveness. Product quality and reputation are two other important factors (Esfahani 1991).

Trends in relative exchange rates are explained by the competitive position of the country (OECD 1992, 241). '[C]ountries which have large number of industries in which they have a relatively high rate of innovation by international standards tend to experience a systematic appreciation of currencies over long-periods, while less innovating countries witness persistent trade deficits and long-term currency depreciation' (Catwell 1989, 181, cited in OECD 1992, 241). Finally, the environment within which firms operate, including structural characteristics of the country and government policies, has an important bearing on the competitiveness of firms (Porter 1990; Best 1990). There is a need for 'moving away from static sources of cost advantage' (Lall 1990, 13).

Alternative Theories: Dynamic Approach

There is no satisfactory theoretical framework relevant to the case of developing countries. To formulate my own framework of analysis I have benefited from and developed the views and theories of a number of economists including List (1856), Kalecki (1976 [1955]), Schumpeter (1976 [1934]), Penrose (1959), Hirschman (1958), Lazonick (1991) and, particularly, Reinert (1995). According to List (1856), productive power is the main source of comparative advantage and development, and mental capital (knowledge), rather than material capital, is the main source of productive power. Division of labour and accumulation of capital are the results of development. Knowledge is not given; it is to be acquired through education, science, training, research, discoveries, inventions, experience and division of labour. Further, development of knowledge is determined by social order, that is, socio-political and institutional factors as well as government policies. List's theory is a dynamic one, and it is an important step forward, but the role of the firm in his theory is not well developed.

Kalecki (1976 [1955]), like List, gives importance to socio-political and institutional factors and government policies (see Shafaeddin 2005b). Accordingly, the contribution of capital accumulation to capacity building and development is limited by institutional, infrastructural and other structural factors. However, he ignores the important role of the firm in his theory of capacity building in developing countries, even though in his

theory of capitalist economy, designed for the case of developed countries, firms play an important role.

Schumpeterian approach

Schumpeter (1976 [1934]) was a pioneer in placing the role of the firm and entrepreneurship at the centre of his dynamic theory of competitiveness and development. Accordingly, a firm is active, has a strategy and has the knowledge and capabilities to change technology. It influences not only the market but also the performance of other firms through its 'creative destruction', and its strategy has implications for competitiveness at the national level.

Firm level Competition is a process of moving from one disequilibrium to another, rather than a process with a tendency towards equilibrium. Competition is a process of 'creative destruction' and discontinuous change. As production is a process of combination of materials with other inputs, creative destruction means creating new combinations implying the 'competitive elimination of the old [combination]' (Schumpeter 1976 [1934], 67). The new combination, whether by combining existing resources in a new way or with new resources, could include:

- The introduction of a new good; that is, one with which the consumers are not yet familiar – or of a new quality of goods.
- The introduction of a new method of production; that is, one not yet tested by experience in the branch of manufacture concerned, which by no means need be founded upon a scientifically new discovery, and can also exist in a new way of handling a commodity commercially.
- The opening of a new market; that is, a market into which the particular branch of manufacture of the country in question has not previously entered, whether or not this market has existed before.
- The conquest of a new source of supply of raw materials, or half-manufactured goods, again irrespective of whether this source already exists or whether it has first to be created.
- The carrying out of the new organization of any industry, such as the creation of a monopoly position (for example, through trustification) or the breaking up of a monopoly position (Schumpeter 1934, 66).

Such a process of competition:

commands decisive cost or quality advantage and . . . strikes not at the margins of the profits and the output of existing firms but at their foundations and their very lives. This kind of competition is as much more effective than the other [competition on price] as a bombardment is in comparison with forcing a door, and so much more important that it becomes a matter of comparative indifference whether competition in ordinary sense functions more or less promptly; the powerful lever that in the long run expands output and brings down prices is in any case made of other stuff. (Schumpeter 1976 [1934], 85)

By the 'other stuff', Schumpeter implies the process of creative destruction: 'the same process of industrial mutation . . . that incessantly revolutionizes the economic

structure *from within*, incessantly destroying the old one, incessantly creating a new one. This process of creative destruction is the essential fact about capitalism' (ibid., 83).

In this sense, firms are not identical; they have different capabilities. They have different access to factor market, inputs and technology; different innovating abilities; different rates of in-job skill creation; different information about the market; different marketing channels and distribution networks; and different entrepreneurial and organizational capabilities. Their specific capabilities provide them with a capacity to take strategic actions, through the various Schumpeterian means outlined above, to create profit opportunities in the form of rents by developing a sort of temporary monopoly position. The monopoly position would be temporary as other firms in the same industry are also engaged in a process of creative destruction to develop a 'new combination' superior to that of their rival in order to create profit opportunities for their own firm. This type of rent is a sort of 'entrepreneurial' rent different from the monopoly rent arising from ownership of natural resources, or windfall rent created by chance.

The most important implications of the Schumpeterian approach is that the firm is a driving force in economic activities; competition is a process through which a firm has to deal with disequilibrium, and it faces a 'moving target' as a result of the strategic actions taken by other firms involved. The Schumpeterian firm shapes the market by changing the cost curve and creating value to the consumers. According to Best, such a firm has three main characteristics:

- it 'does not seek to maximize profit simply by minimizing costs but seeks strategic advantage on the basis of Schumpeterian innovation in production, process, or organization';
- its goal 'is to gain strategic competitive advantage by continuous improvement in process and products'; and
- it maintains organizational flexibility in order to adjust its competitive strategy 'depending upon the strength and weakness of its competitors at any point in time' (Best 1990, 11–12).

National level At the national level, the Schumpeterian approach to competitiveness is also a dynamic one, and it is a means of raising the standard of living of the population. The OECD (1992, Ch. 11, esp. 237) fully accepts the definition proposed in the 1985 Report of the US Presidential Commission on Industrial Competitiveness (Vol. II, 7) which, in turn, is close to the definition proposed by Bruce Scott, a scholar of Harvard Business School – with one exceptional difference. According to him:

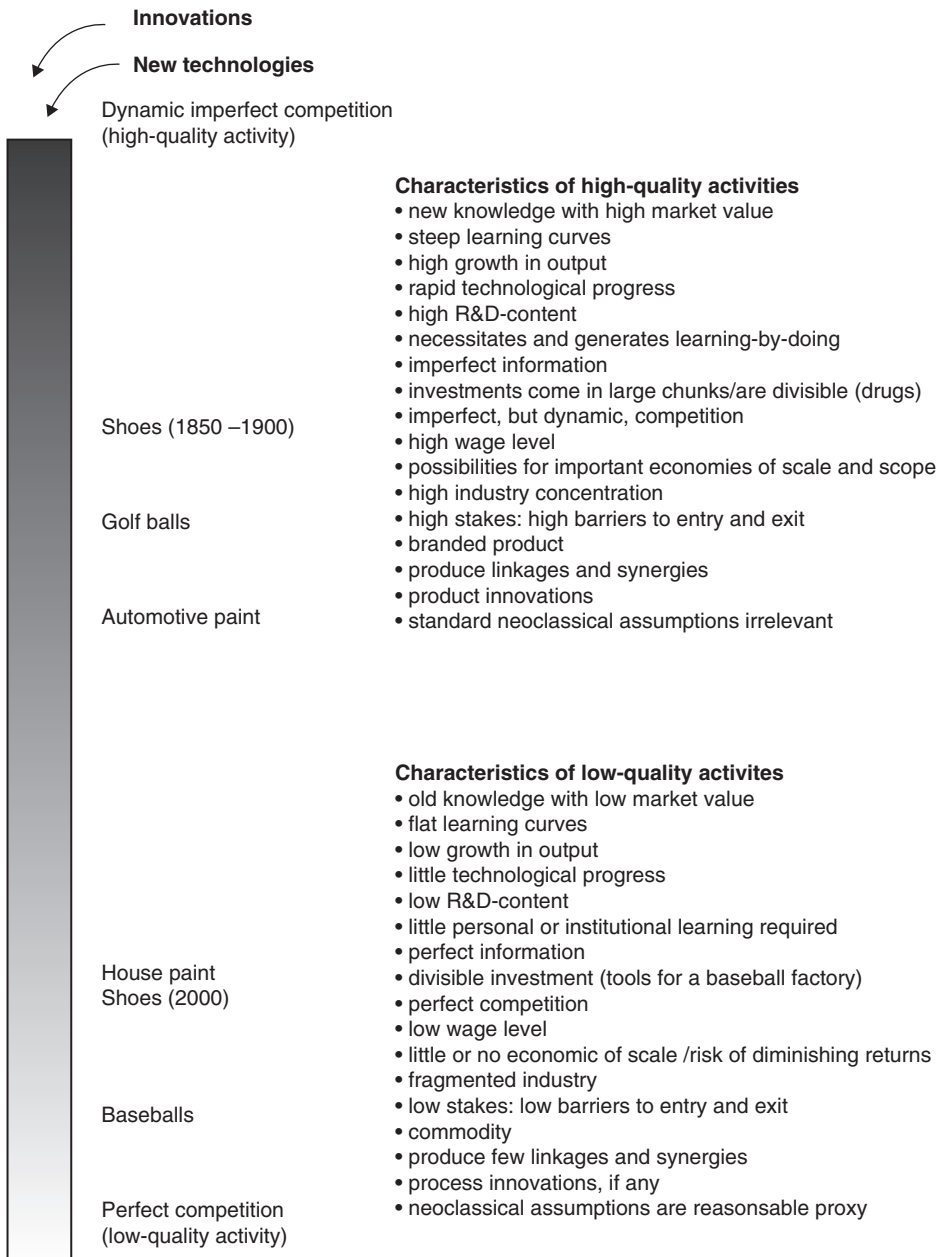
National competitiveness refers to a nation state's ability to produce, distribute and service goods in international economy in competition with goods and services produced in other countries, and to do so in a way that earns a rising standard of living. The ultimate measure of success is not a 'favorable' balance of trade, a positive current account, or an increase in foreign exchange reserves: it is an increase in standard of living. To be competitive as a country means to be able to employ national resources, notably the nation's labour force, in such a way as to earn [a] rising level of real income through specialization and trade in the world economy. (Scott 1985, 14–15)

In Scott's definition, gaining or maintaining market share is a necessary condition, but it is not sufficient. The sufficient condition is that it also improves the standard of living: that is, it contributes to the income growth of the population in the form of returning to both labour and capital, and to the creation of employment (*ibid.*, 15). He also refers to the question of income distribution. Therefore, if an increase in sales and market share is accompanied by decreased real wages and/or profit, it either reduces the total income of the population or leads to deterioration in income inequality. He emphasizes that, 'ordinarily the competitive challenge for a nation is to maintain or increase market share while enhancing wages and salaries as well as the returns on capital' (*ibid.*, 16). Thus, the key indicators of competitiveness include: 'market share, profitability, real incomes for employees, employment, productivity, relative unit cost levels both for capital and labour and investment for the future in new technologies (R&D), new equipment, and enhanced skills for employees' (*ibid.*, 16). In this sense, national competitiveness is an element of development; it refers to activities which, while 'being competitive' in the micro sense, also contribute to development, raising income and improvement in the standard of living (Reinert 1995, 26). Otherwise, one could think of a situation where the improvement in efficiency and productivity is transferred entirely to other countries, as argued by Prebisch in the case of primary commodities.

Reinert maintains that, 'the very idea of a nation lifting itself to higher levels of living standards through competitiveness – being engaged in activities that raise the national living standards more than other activities – goes directly against the assumptions and beliefs which form the foundation of the neoclassical economic edifice' (Reinert 1995, 26). Unlike Scott, the reports of the OECD and the US Presidential Commission are based on the assumption of the prevalence of a free market, which is unrealistic under the current market structure dominated by large firms and influenced by government policies.

Growth in productivity due to technological change, innovation and other factors is obviously beneficial. What is important according to Reinert, however, is that 'an important portion of the benefits is being distributed inside the producing nations through higher profits, higher wages, and higher taxable income overall' (*ibid.*, 27). Choosing activities which capture high value added and carry high factor earning and rents, appropriating such rent and continuously upgrading, can contribute to achieving this goal. Incidentally, the question of appropriation of rent explains the registration of patents and protection of technology governed by the IPR agreements, through WTO and other forums, by developed countries (see also Oxley and Yeung 1998, xiv, xxvi). Sectors which have special value to the economy include 'high-value-added sectors, linkages sectors, sunrise industries, and catalyst industries' (*ibid.*, 208). In a more general term, one may speak of supply-dynamic and demand-dynamic industries. Supply-dynamic industries are those that provide linkages, spillovers, thus externalities to other activities. Demand-dynamic industries include those for which demand rises fast in the international and domestic economy because of their high income elasticity (UNCTAD 2002). Thus, upgrading is required to sustain competitiveness.

The upgrading of the production structure is a feature of the Schumpeterian approach to competition which implies mobility, that is, 'movement of factors of production from low occupation to high reward ones' (Reekie 1979, 11), or upgrading from low-value uses towards high-value uses (*ibid.*, 82). The process of upgrading is depicted in Figure 30.1. As is shown, low-quality activities are the characteristics of a situation where static



Source: Reinert (1995, 39).

Figure 30.1 *The process of upgrading and moving from a low-reward occupation to one with high rewards*

comparative advantage and perfect competition prevail. Slow growth as well as low wages and income are two main results of low-quality activities which involve low levels of technological progress, R&D, learning, and thus lack knowledge and scale economies. By contrast, the high-quality activities take place under dynamic imperfect competition involving steep learning, rapid technological change, R&D, important economies of scale, and a high growth of output and income. Nevertheless, such characteristics and outcomes are irrelevant in the world of static comparative advantage and perfect competition.

Moving up from competitiveness in low-quality activities to high-quality activities does not take place only through the operation of market forces, a passive firm and the government type envisaged by neoliberals. To achieve competitiveness by pursuing policies for attaining dynamic comparative advantage requires firms with specific characteristics and strategies; it also requires strategies at the national level. Economic development requires developing supply capacity, making it efficient, and upgrading the industrial structure. These activities are policy-induced, requiring government intervention to encourage specialization based on dynamic comparative advantage.

MY APPROACH TO COMPETITIVENESS AND DEVELOPMENT

While the Schumpeterian concept of the firm is the centrepiece in my analysis, I argue that firm is not an abstract concept: it is the main coordinator of economic activities, and it has links with other firms, the market, the government and consumers (Figure 30.1; and Shafaeddin 2005b). Accordingly, competition takes place for a firm, located in a specific country with specific characteristics and environment, against other national and international firms, regarding a particular product or products, in a marketplace with a specific structure, under certain world economic conditions. To achieve their objectives, firms and their governments take certain actions and pursue a strategy over time.

Entrepreneurs not only play the coordinating role, but also perform the 'creative' and 'cooperative' functions (Hirschman 1958). Moreover, like Penrose (1959), I regard a firm as a collective learning unit. Firms are 'living organs' with their own specific culture, collective capabilities and specific knowledge; therefore, knowledge is firm-specific.

Finally, I regard competitiveness as a means of development, not an end in itself. To increase income and the rent accrued to a firm and a country, a firm should operate in such a way as to make it difficult for other firms to compete with it, by creating a unique situation that cannot be replicated easily. Creating barriers to entry is often considered to be a means of achieving this objective. More important, however, is creating value for buyers in a unique way. This can be done through a number of measures, of which creating a favourable reputation and a unique corporate culture are the most important. Competitiveness, as a means to development, is in the sphere of dynamic comparative advantage and the 'creative function' of the market. Developing the necessary capabilities in turn requires taking policy measures and actions based on strategies at the levels of firms, sectors and the national economy, as argued by the proponents of capability-building theory (e.g. Lall 1990).

A Schumpeterian–Penrosian firm is an administrative and managerial unit; it is also a living social organ with its own unique culture. In the first sense, a firm, particularly a

large firm or TNC, is a planning unit in which economic activities are performed without going through the market. In the second sense, a firm is more than an administrative-organizational unit. It is a growing organ not 'a price and output decision maker for given products' (Penrose 1959, 14). It is 'a collection of productive resources the disposal of which between uses and over time is determined by administrative decisions' (ibid., 24). Accordingly, a firm has the following main characteristics: it is a collection of productive (human and physical) resources; it is a social organ with a unique culture through which the employers have contact with each other and with the outside world for performing their activities; it has a distinctive culture of learning which, together with its employees' teamwork, contributes to its capabilities and organizational aspects.

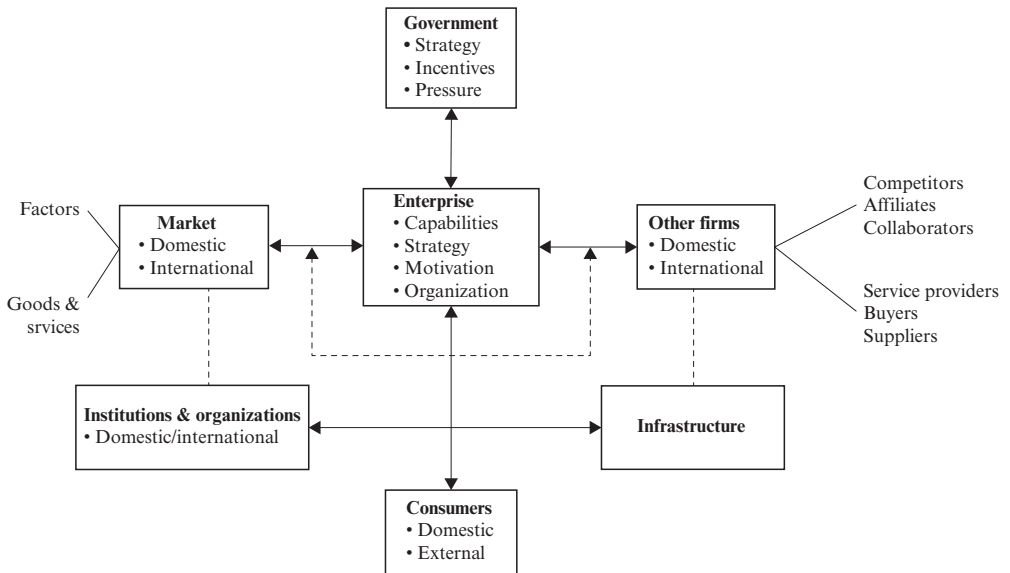
IMPLICATIONS FOR COMPETITIVENESS

The above approach to the definition of the firm has important implications for the accumulation of knowledge and experience and for entrepreneurship, which are two crucial factors in competitiveness by achieving dynamic comparative advantage. Knowledge and experience have become increasingly significant in the present system of global production and distribution. Therefore, the role of human resources and the culture of the firm in learning, the development of specialized skills, knowledge creation and competitiveness are crucial. Specialized skills and knowledge have a few main characteristics:

- They are embodied in individual workers as well as managers.
- They are firm-specific and often personalized
- They are a sort of 'capital stock that can be accumulated only through investment in education and training and through gaining experience' (Odagiri 1992, 1). The knowledge and experience do not transmit entirely through the market.
- It is the combination of services provided by various individuals, rather than the collection of individuals' knowledge, that gives a firm its unique characteristics. In other words, any competitive firm has the knowledge of being in a unique situation, different from other firms (Reekie 1979, 7). The new knowledge developed within a firm through specialization, learning and experience is essential for the process of innovation and productivity growth needed for competition in the marketplace, as will be explained later.

THE FIRM AS A COORDINATING AGENCY

The traditional theoretical literature on the coordination of economic activities regards, explicitly or implicitly, the market and/or government as the only coordination mechanism. In practice, the coordination of economic activities in an economy takes place through a combination of markets, state and firms, complemented by 'non-price factors'. The non-price factors include institutions, organizations and infrastructure. Such a coordination system is also influenced by the outside world. None of these mechanisms, however, is perfect on its own and each cannot succeed without interaction with the others, and without the complementary role played by non-price factors. Figure 30.2



Source: Shafaeddin (2005c, 113).

Figure 30.2 Interlinkages of market, firms, government and 'non-price factors'

shows the interrelation among various mechanisms. The nature of that combination, the relative role of each mechanism and the degree of the interaction among various mechanisms vary from one country to another and over time in each country, depending on the level of development and the structural, historical and socio-political conditions of the country. It is also influenced by the interrelation among various sectors of the economy. No generalization can be made. Nevertheless, contrary to the assumption made in the neo-classical theory, Figure 30.2 indicates that the firm is an active and driving force in such a coordination system, around which the other coordination agents operate (see Shafaeddin 2005b, Ch. 4 for details).²

Interaction with Other Agents

In a world where large firms increasingly dominate production and international trade, coordination of certain transactions or economic activities increasingly takes place through non-market coordinating mechanisms within a firm rather than through the market. These mechanisms include strategic planning – the planning system – and vertical and horizontal coordination among firms through networking, long-term supply and purchase contracts, technological alliances, and so on (Galbraith 1975; Williamson 1975; Lazonick 1991; Best 1990; Porter 1990).

The success of entrepreneurs depends on three main factors: their capabilities to

² The following paragraphs are based on Shafaeddin (2005c).

Table 30.1 The largest 100 TNCs and their home countries, 2012

Industry	No. of companies	Home countries	No. of companies
Automobile	12	USA	22
Petroleum	11	France	16
Utilities	11	UK	12
Pharmaceuticals	11	Germany	12
Telecom	8	Japan	6
Electronic and electric equipment	7	Switzerland	5
Food, beverages and tobacco	7	Spain	3
Mining and quarrying	5	Italy	3
Chemicals	4	Sweden	3
Retail and wholesale trade	4	Netherlands	3
Diversified	4	Australia/UK	2
Business, consumer, engineer services	4	Israel	1
Non-metallic minerals	3	Belgium	1
Aircraft	2	Luxembourg	1
Metal and metal products	3	Austria	1
Business, consumer, engineer services	4	Norway	1
Transport and storage	2	Canada	1
Construction	1	Finland	1
Business, consumer, engineer services	4	Denmark	1
Gold mining	1	Denmark	1
		Hong Kong	1
		Malaysia	1
		China	1
		Brazil	1
		Mexico	1
Total:	100		100
Of which:			
Developed countries			95
Developing countries and China			5

Source: Based on UNCTAD (2013).

develop and update the firm's strategic behaviour on the market, thus their ability to compete on price and 'non-price attributes';³ their capabilities within the internal organization of the firm to attain efficiency, productivity and upgrading; and the environment within which they operate, which to a large extent is influenced by government policies and strategies at the macro, sectoral and micro-levels. In other words, the active behaviour of a firm towards other firms, market, government and the outside world, as well as its strategic behaviour, affect the performance of the firm.

TNCs are owned predominantly by developed countries, and firms of developing countries are affected by their activities and strategies. As is shown in Table 30.1, each

³ 'Non-price attribute' implies all attributes of a products such as quality, reliability, speed of delivery, and so on.

industry is dominated by a few TNCs. The recent crisis in the financial market has been accompanied with yet more mergers among large companies, particularly in the US. Although the value of the mergers is not high because of the fall in stock prices, their impact on market concentration is particularly important (Shafaeddin 2010b, 15–16).

The relative role and success of firms depends on three main factors: motivation (incentives), pressure, and the internal organization of the firm by the management. This in turn depends, *inter alia*, on the degree of entrepreneurship of the managers. The market, through forces of competition, and the government, through other incentives and/or disciplines, provide motivation and puts pressure on the entrepreneurs.

Dynamics of Changes

The relative role of firms in relation to the market and the government may vary from one country to another and over time in each country. Nevertheless, at the early stages of their development, developing countries face a dilemma because all elements of the coordination mechanism run the high risk of failure. Market failure is pervasive, the risk of entrepreneurship failure is high, and the formal sector is underdeveloped. Similarly, the risk of government failure is significant because of the low capacity of the government. The lower the level of development, the higher is the risk of coordination failure. Moreover, there is a vicious circle: the country is underdeveloped because of the failure of the coordination mechanisms; the coordination mechanisms fail because of the low level of development. This vicious circle, however, does not justify the elimination of government intervention, and it underestimates the role of firms or the market. To break this circle, action should be taken on all fronts: to create or improve markets; to increase the organizational capacity of entrepreneurs; to develop the necessary infrastructure and institutional framework of the country; and to increase the capacity of the state in policy formulation implementation.

Nevertheless, to break the vicious circle, initially a key role is to be played by the government, as indicated by the experience of all developed countries, newly industrialized economies (NIEs) and next-tier NIEs (see Shafaeddin 1998); neither the market, nor the non-price factors such as institutions, organizations and infrastructure, will be developed rapidly by market forces *per se*. The development of the state capacity requires education, training, motivation, sense of responsibility by the civil service, discipline and, most of all, the enhancement of the learning capacity, that is, ‘learning to learn’.

Since the design of industrial policy for achieving competitiveness with development differs from one country to another, nobody knows what the ‘right policy’ should be in each specific case. It is a question of trial and error: learning by doing. As markets, firms and non-price factors are developed, government intervention may be gradually reduced in favour of the market and firms.

Strategy

Different scholars define strategy differently. I prefer the definitions provided by Fahey (1994) and Davies et al. (2003). ‘Strategy [of a firm] is the means by which the organization creates and leverages changes in and around the market place’ (Fahey 1994, 7).

Davies et al. define it in a similar fashion: 'strategy is about matching the competence of the organization to [the opportunities and challenges of] its environment. A strategy describes how an organization aims to meet its objectives' (Davies et al. 2003, 4). More precisely, strategy is about the direction of the firm to guide business over time. Thus, it implies initiating changes not only in response to events in the internal and external environments, but more importantly in anticipation of those changes. However, while their definition is a micro-concept, it can be generalized to the business unit, corporation, industry and, particularly, the country – that is, national industrial strategy. As upgrading is essential in competitiveness in its dynamic sense, a strategy should also encompass issues related to upgrading at all levels.

One may also refer to strategies according to different functions of a firm: production (manufacturing) strategy comprising of mass production, vertical integration, production-sharing, diversification and flexible production; marketing strategy; advertisement strategy; human-resource strategy; information strategy; financial strategy; R&D and technological strategy. For the sake of analysis one should also distinguish production strategy in general from export strategy; although they have many elements in common. Many of the firm-level strategies, outlined above, are also relevant at the national level.

The external environment may create both risks and opportunities for a firm as well as for the country. Development in the global economy, changes in the market structure of an industry, technological changes, as well as policies of other governments and international rules and regulations, are relevant at all levels: country, industry, firm and business unit. For a firm or business unit, changes in competitive strategies of rival firms, possibility of new entrants, policies of buyers and suppliers and product and factor markets, and changes in the national environment, both economic and socio-political, are also to be considered. The strategy of a firm is also linked to both the creative and the cooperative function of an entrepreneur. The strategies related to creative functions are the domain of economics and business as outlined under different functional strategies above. The cooperative function of entrepreneurs requires socio-political and external-relations strategy. The socio-political situation changes; so do the relations with suppliers, buyers and others.

A national competitive strategy is as important as, if not more than, a firm-level strategy in the development of competitive industrial capacity. In such a strategy, trade and industrial policies, technological learning, R&D and training for technological development take the central role. To follow a strategic approach at any aforementioned level, a country requires vision, mission, organization and structure for various stages in a firms' policies and activities; that is, formulation, implementation, and control and revision.

Productivity

In its normal sense productivity depends only on the physical volume of goods produced. In the Schumpeterian sense productivity is influenced by three factors: the physical volume of goods produced, the value created for consumers, and the allocation of income generated along the value chain to the producing firms.

Implications for Developing Countries

The very existence of Schumpeterian competition has implications not only for established firms, but more importantly for newcomer firms, particularly firms of developing countries. It has implications for established firms because, as Schumpeter states: 'It disciplines before it attacks' (Schumpeter 1976 [1934], 85). In other words, each firm is constantly under competitive pressure. Newcomer firms of developing countries have little or no experience and capabilities, they lack information and technological knowledge and do not enjoy economies of scale. Under these circumstances, following market-oriented approaches will lock them into production based on static comparative approaches. There is a need for strategies and policies on the part of not only the firms themselves but also the government.

GOVERNMENT POLICIES

The process of building up a competitive industrial base requires accelerating the productive capacity, making it efficient and competitive on the international markets, and upgrading the industrial structure. None of the elements of such a process could take place automatically through the operation of market forces alone. The development of endogenous capabilities of national firms necessitates government intervention in the process of both production and exportation. Government policies should encompass, *inter alia*, dynamic and flexible trade and industrial and technological policies, complemented by strategic actions at the enterprise level.

These issues require a separate full chapter as they are complicated and important. Here, I will refer briefly to a few general principles. To begin with, developing countries can be classified into three categories for analytical purposes. The first group includes low-income countries, such as sub-Saharan countries, with little industrial capacity. The second group are those which have developed some industrial capacity through import substitution, but they have few export capabilities, as they are not particularly competitive on the international market. The countries included in this group are mostly in the Middle East and Southeast Asia. The third group are those with some industrial and export capabilities, but they need to upgrade their industrial sector further. The policies that each group needs to follow are not entirely the same. At early stages of industrialization, government policies should be geared mainly to the acceleration of supply capabilities. Subsequently, the efficiency of the installed capacity requires the attention of policy-makers before attempts are made for upgrading, which requires, *inter alia*, technological policies.

Supply Expansion

According to the neoliberals, including proponents of the Washington Consensus, all that is necessary for rapid growth of supply is the allocation of resources in accordance with the principle of static comparative advantage. Technology and technological progress is 'manna from heaven', and higher productivity is the result of increasing capital per worker. As long as the 'basics are put right', the economy will flourish under

the free operation of market forces (World Bank 1993; Williamson 1990). The role of the state should be confined to providing an enabling environment for the private sector and a regulatory framework for the operation of the free market and civil society (World Bank 1997, 2001).

The opponents of neoliberal theories have different views. For example, according to the proponents of the catch-up theory, there is a need for active government policies (Gerschenkron 1962). The government policies can facilitate investment in leading industries by applying available technology, establishing large firms, developing interdependent industries and supporting infrastructure (see also Veblen 1915; Fagerberg et al. 2009, 130–149).

By contrast, in his theory of ‘social capability’, Abramovitz (1986, esp. 356–387) argued that ‘productivity growth rates tend to vary inversely with productivity levels’, and industrialization can take place through free operation of market forces, flexible labour market and integration with the world economy, and so on.

Like Gerschenkron, Abramovitz argues that a lack of social capabilities can limit catch-up potential. Social capability is identified with technical competence; the level and quality of the educational system; research facilities; experience in management, organization and operation of large-scale enterprises; infrastructure and the legal and regulatory apparatus of the government; developed political and social characteristics that influence the risks and the incentives and personal rewards; commercial, industrial and financial institutions to finance and operate large-scale business; and a competitive market structure (Abramovitz 1986, 386–387; 1994, 25). Further, there are cumulative forces created by an interaction between technological development and social capabilities (Abramovitz 1994, 25, 38, 47).

Critique of Abramovitz

A backward country cannot, in fact, have the required social capabilities. Thus, government action is required at early stages of development. In fact, Abramovitz himself admits in his 1994 article that ‘the institutional and human capital components of social capability develop only slowly’ (ibid., 405–406). Further, he gives some weight to the ‘stability and effectiveness of government’ and government policies, regarding it as an element of social capability. ‘It was government that provided much of early impetus’ (ibid., 35).

Abramovitz also implicitly, and wrongly, assumes that technology of all kinds is freely available and costless, as well as that the world economic conditions, international market, the operation of TNCs and policies of advanced countries have no negative bearing on the growth of a backward country. It is true that in the case of the USA, at its early phase of development, the transfer of technology took place despite some control by the British government. Nevertheless, currently, technology transfer is governed by IPRs, the transfer of which is either not possible, in certain cases, or is highly costly.

In short, the acceleration of growth for catching-up cannot take place automatically through the operation of market forces and the passive role of government, in particular in countries which are at early stages of development; ‘there is nothing automatic about convergence’, that is, catching-up (Nelson and Wright 1992, 961). In fact, under the operation of market forces, the economies of developing countries may diverge from those

of advanced economies (see, e.g., Myrdal 1957; Kaldor 1981).⁴ Less-developed countries may be caught in the 'backwash' as capital and technology flows to advanced countries increase (Myrdal 1957).

Acceleration of Supply Capacity: Kaleckian Approach

Kalecki (1976 [1955]) initiated a comprehensive theory of acceleration of growth in which he envisaged an important role for international trade and government. Here, I will develop his ideas considering changes in the global economy during recent decades. To proceed, let us assume that the economy is closed before introducing the role of foreign trade, foreign credit and foreign direct investment (FDI) and change in the terms of trade.

To accelerate the rate of growth of production capacity without inflationary pressure it is necessary, *inter alia*, to increase the investment-income (I/Y) ratio, thus the propensity to save given the possibility of external financing. Nevertheless, the capacity to invest may be limited by the supply of physical and human resources (both skilled and unskilled labour) as well as institutional and political factors. Physical resources include infrastructure, capital goods, intermediate goods and raw materials as well as consumer goods, both necessities (basic needs) and non-essentials (luxury items). The lack of infrastructure limits the use of other resources, and institutions may create, or fail to remove, constraints on growth. Capital goods, raw materials and food crops are among supply-determined industries. The long-run rate of growth of supply-determined industries is limited by technical and organizational and/or natural or institutional barriers or the scarcity of trained labour and long gestation periods 'so that even a considerable increase in capital outlays will not help to raise their output at a high rate' (Kalecki 1963).⁵

Even when investment resources are available, excessive injection of funds may result in an inflationary pressure and redistribution of income in favour of the upper classes. If wages also increase, an inflationary spiral will become inevitable, affecting the competitiveness of the domestically produced goods.

International trade and finance will contribute to the availability of supply-determined products. But their contribution to the availability of skilled labour and institutional factors is limited. The rapid expansion of imports requires a favourable growth in export earnings or the availability of foreign sources of finance. Thus, a rapid transition of infant industries to the export market is important. Nevertheless, the contribution of imports to growth is limited because of a growing demand for imports other than necessities; adverse effects of agricultural policies of developed countries on the growth of food crops and some other agricultural products as well as trade liberalization by the developing countries; and the lack of complementary factors such as infrastructure, skilled labour, supply of non-traded supply-determined goods (for example, utilities) and services, and institutional factors.

External sources of finance and an improvement in the terms of trade have supply effects and financial effects. Nevertheless, they also involve some negative effects. They contribute to the availability of various goods and add to the financial resources. Foreign

⁴ For a review see Fagerberg et al. (1994).

⁵ In contrast, demand-determined industries are supply-elastic; their output can be increased in the short and medium run more easily than that of the supply-determined industries (Kalecki 1963).

grants, unlike foreign credits, do not involve repayments and debt services, but they may carry some conditionalities attached. An improvement in the terms of trade adds to the availability of foreign exchange without conditionalities. FDI also involves both supply effects and financial effects. The TNCs can also act as a channel for exports. But the spill-over effects of FDI to the national economy depend on the capabilities of domestic firms.

Reliance on external sources of financing beyond a limit also has some detrimental impact on the process of capacity building. External borrowing involves the accumulation of debt which has to be repaid through the expansion of exports. If infant industries are not rapidly transformed into export promotion and grants are not abundant, debt repayment will become a problem. Consequently, the government may rely on loans from international financial institutions and/or further grants from donors. Such sources of finance often involve some conditionalities, including currency devaluation, uniform (across the board) trade liberalization, expenditure cuts, and so on.

Impact of devaluation

The impact of devaluation on production cost in the manufacturing sector, particularly for exports, is greater than in other sectors because of its higher import intensity; it results in uniform price changes over the whole range of tradable goods rather than increasing the relative prices of selected products; and it tends to turn the domestic terms of trade in favour of primary commodities and against manufacturing goods.⁶ Hence, devaluation decreases the international price of manufactured goods, but does not change their domestic prices, except for the contribution of increased cost of imports (see also Streeten 1987; Schydrowsky 1982, cited in Fontaine 1992; Shafaeddin 1991). In the case of agricultural goods, cash crops benefit more than food crops from devaluation (Stewart et al. 1992).

Moreover, devaluation cannot stimulate investment because of import shortages, higher costs of imported inputs and reduced effective demand as a result of contractionary macroeconomic management (when structural adjustment is also imposed on the country); it could lead to a decline in productivity (Shafaeddin 1992). It could also lead to serious inflation, reducing the prospect for real devaluation (Shafaeddin 1993).

Finally, while devaluation by a large number of countries producing the same commodity may lead to a higher output of the commodity (cash crops), it will result in terms-of-trade losses due to the 'fallacy of composition' (UNCTAD 2002, Ch. IV), as exemplified by the case of tea and other commodities which constitute the major exports of least-developed countries (LDCs) (Bhaskar 1989; Gilbert 1988; Maizels 1988; Wattleworth 1988). Production of the same light manufactured goods by a large number of countries will also be subject to the 'fallacy of composition' and terms-of-trade losses (UNCTAD 2002).

⁶ When the country is a producer of standard manufactured goods, the price of such goods on the international market may also behave like the price of primary commodities.

Efficient Use of the Installed Capacity and Upgrading

The need and modalities of trade and industrial strategies

To achieve competitiveness at a high level of development, the installed capacity should be utilized efficiently and upgraded over time, requiring an appropriate development strategy, particularly trade, industrial and technological policies. To enter the international market a newcomer firm of a developing country faces two types of disadvantages: relative cost and uncertainty. The lack of internal economies of scale, particularly the 'learning effects', the learning cost of innovation and difficulties in upgrading put it in a disadvantaged position. The lack of knowledge (due to the infancy of the newcomer firm) and of familiarity with the international market, and uncertainties related to barriers to trade, are among the other inhibiting factors (Dasgupta and Stiglitz 1985). There are, in fact, three layers or phases of infancy: production infancy, export infancy and technological (or innovation) infancy. For this purpose,⁷ there is a need for trade and industrial policies as well as technological policies.

Trade and industrial policies need to be selective, mixed, flexible, conditional and dynamic – for both theoretical and empirical reasons (Shafaeddin 2005a). In contrast to the philosophy behind structural adjustment and stabilization programmes of the IFIs, it would be naïve to believe that across-the-board, rapid and premature liberalization, operation of market forces and competitive pressure per se will induce firms to become efficient and competitive on the international market in a way that would help them rapidly raise the standard of living of their population (Shafaeddin 2005b, 2006).

Industrialization should start with some consumer goods involving significant 'learning effects' and externalities (phase I) before developing intermediate and capital goods (phases II and III). In phase I, while the final products of selected established industries are protected, import of inputs to these industries should be free of duties. The provision of protection and incentive should be done in exchange for performance (in terms of cost reduction and quality improvement) and competitive pressure, by allowing new entrants to the field, followed by gradual trade liberalization. To make the industry efficient and competitive, all measures should be taken for the rapid entry of the firms into foreign markets, including the provision of assistance for obtaining market information and the competitive pressure. The enterprises should know in advance that infant-industry protection is temporary.

While the first group of industries goes through the second infancy phase, that is, for entering the international market, their export proceeds should be used for the parallel development of the second group of industries, again on a selective basis, such as other consumer goods and/or intermediate products needed for the first group of industries. As the second group of industries matures, some sophisticated and durable consumer goods and some input to the second group of industries might also be chosen for infant production.

After a while import replacement and export promotion go hand in hand, but in different industries. This process could continue until an industrial base is established and some export capabilities are developed. During such a process, for each industry while the

⁷ The following paragraphs are mainly based on Shafaeddin (2005a).

government intervention in the production process is reduced, the role of the market is augmented and the responsibilities of firms are increased. The cost disadvantage, external economies, lack of experience in exporting and risks related to entry barriers require what I call 'infant export protection' through export subsidy, tax holiday and/or any other fiscal incentives. Once again, incentives should be provided in exchange for performance.

Ultimately, some heavy industries and capital goods may be chosen for expansion and eventual export promotion. The choice of machines may be influenced by the size of the country and the type of existing industries. The industrial deepening (upgrading) should follow industrial widening to avoid terms-of-trade losses. This also requires 'infant' protection or support because of the barriers to entry and the existence of dynamic internal and external economies of learning and scale.

Technological policies and upgrading repeated⁸

Innovation is required for upgrading products, processes, marketing and product services. Innovation can be incremental, radical or systemic – that is, a combination of incremental and radical innovation. Technology can be embodied in machine and equipment or may be tacit, and can be obtained by various types of learning and spillover from one firm to another. Upgrading often requires the acquisition of new technology or its development within the firm; thus a firm should have a technological policy, and the government should provide support for developing productive capabilities. Such capabilities, include, *inter alia*, entrepreneurship, R&D institutional build-up and most of all 'intangible assets', or what List calls 'mental capital.'

Forbes and Wield (2002) have demystified myths surrounding technology issues in the context of developing countries. At an early stage of industrialization, firms in developing countries may act as technological 'followers' – referred to as 'adaptive firms' by Lazonick (1991) – by undertaking adaptive innovation. In doing so, they apply a method of production, process or organization for the first time, which may have been practiced by other firms already. Nevertheless, they have to join the technology leaders eventually. A firm in a developing country would start with capabilities in process innovation by incremental innovation, then move to product innovation, and eventually it would develop its own design, followed by the development of a proprietary product and its upgrading.

Innovation requires a culture of learning and adaptability, government vision and a strategy on the part of the firm. Thus, there is a need for technological policy at both firm and macro-levels. Governments can get involved in technological development directly by undertaking R&D. They should also provide incentives to firms by altering the degree of industrial concentration, drawing up and implementing trade, industrial and financial policies, educational and training strategies and encouraging TNCs in their innovation and technological development. Technological policies could take place through functional and selective intervention through framework policies, focused policies or blanket policies (Lipsey and Carlaw 1998, esp. 423). Framework policies are functional, providing general support for a specific activity across the economy such as patent protection, subsidization or tax credit. Focused policies are selective: they support the development

⁸ This section is based mainly on Gordon (1996).

of a specific technology targeted at a specific activity, for example, certain capital goods. Blanket policies are a mixture of the two: they provide support to some specific activities, such as R&D to viable firms or to projects with a chance of success (Lipsey and Carlaw 1998).

CONCLUDING REMARKS

Having reviewed the static and dynamic approaches to competitiveness, I have shown that the static approach, which is the philosophy behind the neoclassical theory, is based on unrealistic assumptions. By contrast, in the Schumpeterian dynamic approach the international market is not competitive and is dominated by a limited number of TNCs which dominate the international market and, together with governments, create barriers to entry to newcomer firms from developing countries. In the Schumpeterian approach, firms are not passive; they shape the market. The firm is a driving force in coordinating economic activities; competition is a process through which a firm has to deal with disequilibrium and needs to take strategic action. It has links with the market, other firms, consumers and the government.

Considering the structure of the international market and the influences of the governments of the main importing countries, the process of industrialization cannot take place through the operation of market forces alone. I have argued that developing countries can be classified in three groups: for some the creation and acceleration of supply capacity is the crucial issue; for others it is making the supply capacity efficient and penetration into the international market; for yet others it is upgrading the production and export structure. Each developing country should go through these stages over time. At all these stages there is a need for government strategies and policies, particularly on trade, industrialization and technology issues, but the nature of these change over time during the course of industrialization and development.

To implement the strategies and policies outlined above, however, there is a need for government will and a lack of external regulatory constraints. But, in fact, there may be both internal and external constraints. The socio-political will of the government depends, *inter alia*, on its structure and the vested interests of dominant governmental groups that might not necessarily coincide with the interests of the public at large. Further, the government may lack the capacity in policy formulation, decision-making and implementation. What is more, the policy space of developing countries is limited. The implementation of the required policies is constrained by external regulatory issues, imposed by WTO rules and by conditionalities imposed on them by IFIs and bilateral donors through regional and bilateral trade agreements such as the EPAs (Economic Partnership Agreements) of the EU (see Shafaeddin 2010a).

Thus, there is a need for changes in the international rules and practices of IFIs and bilateral donors to make them conducive to the development of a competitive industrial structure and its upgrading in a way that raises the standard of living of the population. It should be mentioned that although WTO rules limit the policy space of developing countries, they still allow them, particularly in the case of low-income ones and LDCs, some room for manoeuvre. For example, member countries can change their tariff rates within the range between actual and bound tariffs; LDCs and

low-income countries (with per capital income of less than \$1000) enjoy some exceptions (Shafaeddin 2010b).

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31. Innovation systems and development: history, theory and challenges

Bengt-Åke Lundvall

INTRODUCTION

When the first edition of Lundvall (2010) was published in 1992, only a handful of scholars and policy-makers were familiar with the concept of a ‘national innovation system’. Over a period of 20 years there has been a rapid and wide diffusion of the concept. The concept is now widely used in research in different disciplines and in all countries policy-makers link the concept to growth, development and competitiveness.¹

In this chapter I argue that during the process of diffusion there has been a distortion of the concept as compared to the original versions as developed by Christopher Freeman and the IKE (Innovation, Knowledge and Economic Dynamics) Group in Aalborg. Often policy-makers and scholars have applied a narrow understanding of the concept, and this gives rise to so-called ‘innovation paradoxes’ which leave significant elements of innovation-based economic performance unexplained.

I will argue that only with a broad definition of the national innovation system encompassing individual, organizational and interorganizational learning is it possible to establish the link from innovation to economic development. A double focus is needed where attention is given not only to the science infrastructure, but also to institutions and organizations that support competence-building in labour markets, education and the working life. This is especially important in relation to developing countries and in the current era of the ‘globalising learning economy’ (Archibugi and Lundvall 2001; Lundvall et al. 2009).

The chapter first takes a brief look at the origins of the national system of innovation (NSI) concept before covering the general background of the history of innovation research.² It confronts the theoretical foundations of the concept with standard economics, before going on to define analytical challenges. It then relates the concept to economic development, inequality and sustainability. The chapter ends with my conclusions.

¹ Google scholar gives more than 2 million hits for ‘innovation system’ while Google gives close to 5 million.

² Several authors have presented overviews of the innovation system literature and made attempts to classify different approaches. An early contribution is McKelvey (1991). More recent ones are Balzat and Hanusch (2004) and Sharif (2006). The latter’s contribution builds upon a combination of literature survey and interviews with key persons who were involved in coining the concept. An interesting critical contribution is Miettinen (2002). Miettinen points to the problematic and vague character of the concept as it is transferred back and forth between the academic and the public-policy spheres.

A CONCEPT WITH ROOTS FAR BACK IN HISTORY

Milestones in the Development of the Innovation-System Concept

At the beginning of the 1980s, the idea of a national system of innovation was immanent in the work of several economists studying innovation. Richard R. Nelson, together with other United States (US) scholars, had compared technology policy and institutions in the high-technology field in the US with Japan and Europe (Nelson 1984). The Science Policy Research Unit (SPRU) at Sussex University pursued several studies comparing industrial development in Germany and the United Kingdom (UK) covering, for instance, differences in the management of innovation, work practices and engineering education.

The idea of a national system of innovation was also immanent in the research programme pursued by the IKE Group at Aalborg University, of which I was a member.³ In several working papers and publications from the first half of the 1980s we referred to 'the innovative capability of the national system of production'. The handier 'innovation system' appears for the first time in Lundvall (1985) but without the adjective 'national'.

The first use of the concept national innovation system is to the best of my knowledge to be found in a working paper by Christopher Freeman written for an OECD working group and it refers to Friedrich List's reference to the national production system as a predecessor to the concept (Freeman 1982; Freeman 2004). When Freeman collaborated with Nelson and Lundvall in the Institute for International Assistance and Solidarity (IFIAS) project on technical change and economic theory, the outcome was a book (Dosi et al. 1988) with a section with several chapters on 'national systems of innovation' (Freeman 1988; Lundvall 1988; Nelson 1988). The concept was consolidated when three major edited volumes on the subject came out in the 1990s (Lundvall 1992; Nelson 1993; Edquist 1997).⁴

The innovation system concept may be regarded as a practical tool for designing innovation policy. But it may also be seen as an analytical focusing device and as a synthesis of analytical results produced by scholars working on innovation. In this section I give a brief review of the history of innovation research with focus on how different generations of economists have contributed to the modern understanding of innovation systems.

Innovation Research Starting with Adam Smith

The idea that innovation matters for economic development is present in the work of the classical economists. Innovation plays an important role in the introduction to Adam Smith's classical work on the wealth of nations (Smith 1904 [1776]). It is especially interesting to note that he identifies and distinguishes two different modes of innovation (see Box 31.1).

³ The IKE Group had the privilege to interact with Christopher Freeman in several projects in this period, and many of our ideas were shaped in a dialogue with him (see, e.g., Freeman 1981).

⁴ For an overview of the current status and prospects of innovation research see Fagerberg et al. (2013).

BOX 31.1 ADAM SMITH ON MODES OF INNOVATION AND LEARNING

Adam Smith (1904 [1776], 8) on the learning by doing, using and interacting (DUI) mode of learning:

A great part of the machines made use of in those manufactures in which labour is most subdivided, were originally the inventions of common workmen, who, being each of them employed in some very simple operation, naturally turned their thoughts towards finding out easier and readier methods of performing it. Whoever has been much accustomed to visit such manufactures, must frequently have been shown very pretty machines, which were the inventions of such workmen, in order to facilitate and quicken their own particular part of the work.

Adam Smith (1904 [1776], 9) on the science, technology and innovation (STI) mode of learning:

All the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines. Many improvements have been made by the ingenuity of the makers of the machines, when to make them became the business of a peculiar trade; and some by that of those who are called philosophers or men of speculation, whose trade it is not to do anything, but to observe everything; and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects.

The first mode is experience-based, and in the chapter I will refer to it as the DUI mode: learning by doing, using and interacting. The other mode refers to science-based research processes, and I will refer to it as the STI mode: science is seen as the first step toward technology and innovation. In this chapter I will argue that this distinction is fundamental when it comes to analysing modern innovation systems and when it comes to designing management strategy as well as public policy.⁵

Friedrich List on the Need for an Active State to Build Innovation Systems

While Adam Smith was propagating free trade and a liberal economy, the German economist Friedrich List disagreed (List 1841). He characterized Adam Smith's theory as 'cosmopolitan' and argued that if followed by other countries, it would just confirm and reinforce the dominance of the British Empire in the world economy (Reinert 1999).

He argued that for countries such as Germany, trying to 'catch up' with the leading economy, there was a need for government intervention. List presented a broad agenda for government in the building of infrastructure that could contribute to technical advance. It is interesting to note that he referred to 'mental capital' as the most important kind of capital. He argued that the wealth of nations more than anything else reflected

⁵ Adam Smith's major contribution was to link the evolving and increasingly more developed division of labour to the creation of wealth. In Lundvall (2006) I have tried to reformulate his theory, emphasizing interactive learning in the context of vertical division of labour, so that it becomes more relevant for explaining innovation-based economic growth.

‘the accumulation of all discoveries, inventions, improvements, perfections and exertions of all generations which have lived before us’ (Freeman 1995a, 6).

Karl Marx on Technological Progress

The historical parts of *Das Kapital* (Marx 1967) give deep insights in how new technologies shape the economy and society. The basic assumption in his historical analysis that new productive forces may get into conflict with ‘production relations’ is a useful guideline for how to study innovation systems. At the micro-level this corresponds to the fact that radically new technologies cannot flourish in firms ‘locked in’ into old organizational forms and competence sets. At the aggregate level it corresponds to the need to transform societal institutions, competences and organizations in order to reap the benefits of technological revolutions.⁶

Marx is a pioneer also when it comes to emphasizing the importance of both ‘science as a force of production’ and ‘technological competition’, where firms need to engage in innovation in order to gain markets and reduce costs. Many of his insights on the role of science and technology in relation to the economy are very advanced for his time (Rosenberg 1976).

Joseph Schumpeter as the Grandfather of Modern Innovation Theory

Joseph Schumpeter is generally seen as the founder of modern innovation research and many scholars who work on innovation would accept to be classified as neo-Schumpeterian.⁷ In his *Theory of Economic Development* (Schumpeter 1934), innovation is seen as the major mechanism behind economic dynamics. The dynamo of the system is the individual entrepreneur who introduces innovations in markets and creates new enterprises. After the pioneers come imitators, and gradually the profits created by the original wave of innovation are eroded.

In *Capitalism, Socialism and Democracy* (Schumpeter 1942), the innovation mechanism is quite different. Here the major source of innovation is not the brave individual entrepreneur but the big company with experts working together in research and development (R&D) teams searching for new technological solutions. The distinction between the two ways to present the motor of innovation has led scholars to refer to ‘Schumpeter Mark I’ and ‘Schumpeter Mark II’.

At one very important point Schumpeter’s ideas deviate from the basic insights behind the innovation system concept. Schumpeter took an extreme position, assuming that the demand side would simply adjust to the supply side.⁸ It is true that he defines the opening of new markets as one kind of innovation. But, in general,

⁶ For a historical analysis of how match and mismatch is reflected in economic performance of national systems, see Freeman (1995b).

⁷ Verspagen and Werker (2003) are interesting in showing which scholars define themselves as ‘neo-Schumpeterians’.

⁸ Another point where Schumpeter’s approach differs from the NSI approach is his neglect of the importance of knowledge and learning for understanding the innovation process. Schumpeter’s entrepreneurs are activists who bring new combinations to the market. How the new combinations come about is left in the dark (Witt 1993, xiv).

consumers and users are assumed to be ready to absorb whatever new innovations are brought to them by entrepreneurs or firms. Actually, it might be argued that the innovation system perspective came out of a criticism of Schumpeter's relative neglect of the demand side.

Schmookler (1966) opened the debate by taking almost the opposite view of Schumpeter. He used a host of empirical data on inventions as well as secondary sources to demonstrate that inventions and innovations tend to flourish in areas where demand is strong and growing. One important outcome of the ensuing debate was a new perspective on innovation as reflecting the interplay between technology push and demand pull. The critical debate of Schmookler's empirical results confirmed this new perspective (Mowery and Rosenberg 1979). The chain-linked model, where both supply push and demand pull are analysed in relation to scientific knowledge, may be seen as one contribution to the new perspective (Kline and Rosenberg 1986). The perspective on innovation as a process of interaction between producers and users may be seen as a micro-dimension of this new perspective (Lundvall 1985).

Christopher Freeman as the Father of Modern Innovation Theory

Christopher Freeman played a key role in stimulating these new theoretical developments, especially in Europe.⁹ In the early 1980s, his lectures to PhD students were on Schumpeter Mark I and Mark II and on the controversy between Schumpeter and Schmookler regarding the role of supply and demand in the innovation process. His founding of the SPRU at Sussex University in 1966 was a major step toward giving innovation studies a more permanent institutional foundation.

One important reference in his lectures at the beginning of the 1980s was to the Sappho (Scientific Activity Predictor from Patterns with Heuristic Origins) study organized at SPRU (Rothwell 1972, 1977). This study was simple but original in design. The research team located a number of innovation pairs – 'twins' in terms of major characteristics – where one of the two was a success while the other was a failure. The two innovations were then compared in terms of characteristics of the 'host' organization. The most important result was that interaction within and between organizations came out as a prerequisite for success in innovation. Innovations that took place in firms where divisions operated without interaction with each other and firms that did not interact with suppliers, users and customers were less successful than the more interactive firms.¹⁰

Freeman pioneered the vision that innovation should be understood as an interactive process; not as a linear one where innovation automatically comes out of R&D efforts. As mentioned above, Freeman was also the pioneer when it came to introducing the concept of the 'national system of innovation' (Freeman 1982, 2004).

⁹ In the US Richard R. Nelson and Nathan Rosenberg played the most important role in developing the theoretical, historical and empirical understanding of innovation.

¹⁰ Another characteristic of the successful innovations was that the project team leader in charge of developing the innovation had certain seniority and was able to mobilize resources in critical phases of the innovation process.

The Flourishing 1980s

The 1980s was a period when innovation research became 'emancipated' and more ambitious, including in confronting basic assumptions in standard economics. Important work took place in different areas both in Europe and in the US. Dosi, Pavitt and Soete made important contributions to the role of innovation in relation to foreign trade (Dosi et al. 1990). Christopher Freeman and Soete analysed employment issues in relation to technical innovation (Freeman and Soete 1987). Giovanni Dosi established his hypothesis on shifts in technological paradigms (Dosi 1984).

In the US, Nelson and Winter's evolutionary economic approach to economic growth signalled a more ambitious agenda for innovation research (Nelson and Winter 1982). Rosenberg and Kline presented the chain-linked model (Kline and Rosenberg 1986). Freeman and Lundvall developed further ideas about innovation as an interactive process and innovation systems together with Richard Nelson.

These different efforts merged into two different major projects. One was a major book project led by a team consisting of Dosi, Freeman, Nelson, Silverberg and Soete (Dosi et al. 1988). The other major project took place in the policy realm and was organized by the Directorate for Science Technology and Industry at the Organisation for Economic Co-operation and Development (OECD). The Technology Economy Programme (TEP) report integrated many of the most advanced ideas developed among innovation scholars in the 1980s, and it gave innovation policy as well as innovation studies a new kind of legitimacy in all OECD countries (OECD 1992). The idea that innovation is an interactive process and that it is useful to analyse national innovation systems was spread to policy-makers.

While the TEP project gave legitimacy to the innovation system concept among policy-makers it did not result in a clean break with the linear model where innovation is seen as emanating more or less automatically from science. In international organizations, as in national governments, the strong position of expertise based upon standard economics contributed to a narrow interpretation of the national system of innovation. Triple Helix and Mode 2 theories also tend to support a perspective where the DUI mode of innovation is neglected.

Intentions behind the Original Conceptualization of National Systems of Innovation

As we have seen, the innovation system perspective integrates principal results from innovation research. For several of the protagonists of the concept, including Freeman and myself, it was not only seen as a tool to explain innovation. It was also seen as constituting an alternative analytical framework and a challenge to standard economics when it comes to explaining competitiveness, economic growth and development. In the next section I compare the NSI perspective with the basic assumptions of standard economics.

Many recent contributions to innovation systems have different and more modest ambitions to 'explain innovation' by linking inputs in terms of investment in R&D to outputs in terms of patents or new products. Other contributions, emanating from international economic organizations analysing national growth performance, combine the system perspective with elements of neoclassical economics. Some even utilize

production-function techniques based upon standard economics assumptions, including agents acting on the basis of rational expectations.

NATIONAL INNOVATION SYSTEM AS ANALYTICAL FOCUSING DEVICE

The innovation system framework is in direct competition with standard economics when it comes to giving advice to policy-makers. In this section I will present the core theoretical ideas behind the innovation system perspective and confront them with those of standard economics. The main conclusion is that the neglect in standard economics of the diversity of agents and of learning as competence-building is a major weakness that makes the approach inadequate when it comes to understanding innovation and dynamic economic performance.

Theoretical Elements Entering Into the Innovation System Concept

As indicated above, the national innovation system approach is grounded in empirical findings through the 1970s and 1980s, many of which emanated from scholars connected to the SPRU. Of special importance were the Sappho study and the Pavitt taxonomy (Rothwell 1977; Pavitt 1984). The Sappho study demonstrated that interaction and feedbacks are crucial for the innovation performance of the firm, while the Pavitt taxonomy helped to show how different sectors interact in the overall innovation process.

But the concept also reflects deductive reasoning explaining the stylized facts observed in empirical studies. For instance, on reflection, it is obvious that product innovation could not thrive in an economy with 'pure markets' characterized by arm's-length and anonymous relationships between the innovating producer and the potential user (Lundvall 1985; Lund Vinding 2002; Christensen and Lundvall 2004).

The only solution to the paradox that product innovations are quite frequent in the market economy is that most markets are not 'pure'; rather, they are 'organized' and include a mix of trust, loyalty and power relationships. To establish these durable relationships it is necessary for the parties involved to invest in codes and channels of information; and to invest in 'social capital'. When it is realized that actual markets are mixed with organizational elements, this opens up the possibility that the elements of organization will differ between national and regional systems. This may be seen as constituting a micro-foundation for the innovation systems concept, and it was presented as such by Nelson in Dosi et al. (1988) and in Nelson (1993).¹¹

Evolutionary economics constitutes a general theoretical framework for the analysis of innovation systems. It is a key assumption in evolutionary economics that agents and organizational routines differ and that diversity is fundamental for the dynamics of the system. Innovation creates novelty and diversity in the system, competition is a selection process that reduces diversity, while some routines are reproduced over time. In what

¹¹ Today we would add to this micro-foundation the nation-specific characteristics of work organization and learning at the workplace. This will be addressed below.

follows I will assume that evolution in terms of what people and organizations know and in terms of how they learn is especially important for the dynamic performance of the national innovation system.

Knowledge and Learning

At the very beginning of Lundvall (2010) it is stated that ‘the most fundamental resource in the modern economy is knowledge and, accordingly, the most important process is learning’. But when this proposition was coined (in 1992) the concepts of knowledge and learning were not at all well developed. Over the last 15 years the attempts to get a better understanding of the knowledge-based and the learning economy have created a more satisfactory theoretical foundation for the understanding of innovation systems by developing the analysis of different forms of knowledge and different modes of learning (see, e.g., Lundvall and Johnson 1994; OECD 2000; Foray 2004; Amin and Cohendet 2004).

The understanding has been developed using the basic distinctions between information and knowledge, between ‘knowing about the world’ and ‘knowing how to change the world’, and between knowledge that is explicit and codified versus knowledge that remains implicit and tacit (Johnson et al. 2002). Lundvall and Johnson (1994) introduced a distinction between ‘know what’, ‘know why’, ‘know how’ and ‘know who’ that has proved to be useful in understanding knowledge creation and learning in innovation systems. These distinctions are especially helpful when it comes to contrast the theoretical micro foundations of innovation systems with those of standard economics.

If neoclassical models include learning, it is either understood as getting access to more information about the world (know what), or it is treated as a black-box phenomenon as in growth models assuming ‘learning by doing’ to be reflected in productivity growth. The very fundamental fact that agents – individuals as well as firms – are more or less competent (in terms of know-how and know-why) and are more or less integrated into knowledge-based networks (know-who) is abstracted from in order to keep the analysis simple. This abstraction is most problematic in an economy where the distribution of competence becomes more and more uneven and the capability to learn tends to become the most important factor behind the economic success of people, organizations and regions (Lundvall and Johnson 1994).

The Theory Behind Innovation Systems

As pointed out, List was critical of the exaggerated focus on allocation as opposed to knowledge creation and growth. Table 31.1 illustrates how the analytical framework connected to innovation systems relates to mainstream economic theory. The theoretical core of standard economic theory is about rational agents making choices to which are

Table 31.1 The two-dimensional shift in perspective

	Allocation	Innovation
Choice-making	Standard neoclassical	Project management
Learning	Austrian economics	Innovation systems

connected well-defined (but possibly risky) alternative outcomes, and the focus of the analysis is on the allocation of scarce resources. As illustrated by Table 31.1, the emphasis is different in the innovation system approach.

The analysis of innovation systems is based upon a two-dimensional shift of focus toward the combination of innovation and learning. While standard economics is pre-occupied with specifying the institutional set-up that results in an optimal allocation of existing resources, here we are concerned with how different institutional set-ups affect the creation of new resources. While standard economics analyses how agents make choices on the basis of given sets of information and competences, we are interested in how the knowledge – including both information about the world and know-how of agents – changes in the economic process.

The NSI-Perspective is More Complex – Not Less Theoretical – than Standard Economics

What has been said obviously implies a more complex theory than standard neoclassical economics, where it is assumed that all agents have equal access to technologies and are equally competent in developing and utilizing them. But it would be wrong to conclude that the theory behind innovation systems is ‘less theoretical’.

Basically, the theory underlying innovation system analysis is about learning processes involving skilful but imperfectly rational agents and organizations. It assumes that organizations and agents have a capability to enhance their competence through searching and learning and that they do so in interaction with other agents and that this is reflected in innovation processes and outcomes in the form of innovations and new competences.

The methodological dictum within neoclassical economics that theory should be both general and abstract sometimes takes Occam’s razor too far, leading to negligence of the concrete and historical. But the most important weakness of neoclassical theory is not that it is too abstract; it is rather that it makes the wrong abstractions. In a context where knowledge is the most important resource and learning the most important process, neo-classical theory tends to abstract from the very processes that make a difference in terms of the economic performance of firms and for the wealth of nations.

Processes of competence-building and innovation are at the focal point in innovation system analysis. The focus is upon how enduring relationships and patterns of dependence and interaction are established, evolve and dissolve as time goes by. New competences are built while old ones are destroyed. At each point of time patterns of collaboration and communication characterize the innovation system. But, of course, in the long term these patterns change in a process of creative destruction of knowledge and relationships. A crucial normative issue is how such patterns affect the creation of new resources and to what degree they support learning among agents.

Standard Economics Favours a Narrow Interpretation of Innovation Systems

Standard economics tends to stick to the idea that only quantitative as opposed to qualitative concepts can be accepted as scientific (Georgescu Roegen 1971). One reason for the bias toward narrow interpretations of innovation systems is that it is much easier to

develop quantitative analysis of R&D and patents than it is to measure organizational forms and outcomes of organizational learning.

Standard economics will typically focus on potential market failure and on choices to be made between different alternative uses of scarce resources. In the context of innovation policy the concerns will be: first, if public rates of return are higher than private rates; and, second, if the rate of return of public money is higher in investing in R&D than it would be in other areas of public investment.¹² The very idea that there might be organizational forms that are more efficient than the ones already in use cannot be reconciled with the basic analytical framework where it is assumed that agents, including firms, are equally rational and competent.

Standard economics will tend to see the market as the 'natural', if not optimal, framework of human interaction and economic transaction. This leads to biased conclusions when considering how to organize the economy (Nelson 2006). The concept of 'market failure' reflects this bias since it indicates that other institutional set-ups should be considered only when it is obvious that the market cannot do the job.

CHALLENGES FOR INNOVATION SYSTEM RESEARCH

The Weak Correlation between the Strength of the Science Base and Economic Performance

Over the last century there has been a focus on the 'European paradox', referring to the assumed fact that Europe is strong in science but weak in innovation and economic growth.¹³ Similar paradoxes have been argued to exist at the national level in countries such as the Netherlands, Finland and Sweden. In a recent OECD report a general result is that for the countries included in the study it can be shown that those that 'perform well' in terms of STI indicators do not perform well in terms of innovation (OECD 2005, 29).¹⁴ This indicates that what is registered is not so much a paradox as a systematic weakness in the theoretical analysis and the indicators upon which it is built.

I would argue that these apparent paradoxes emanate from a narrow understanding of the innovation process. They demonstrate that heavy investment in science in systems where organizational learning within and between firms is weakly developed, and where there is a weak focus on user needs, has only a limited positive impact upon innovation and economic growth. One important challenge for innovation system research is to develop the analysis of innovation systems so that it takes into account experience-based learning and interaction with users.

¹² Within this narrow logic the neglect of learning effects from engaging in innovation will underestimate both the private and public rates of return.

¹³ This debate has triggered strong efforts to link universities to firms in Europe, sometimes going as far as seeing the ideal university as an 'innovation factory'. Dosi et al. (2006) raise doubts about the empirical basis for the paradox; they argue that Europe is not especially strong in science.

¹⁴ After comparing the performance of six countries it is stated that, 'A striking feature is the apparent missing link between indicators A-E and the overall performance indicators in F. This suggests that priorities and biases in the STI-policy system are weakly linked to general economic performance and policies' (OECD 2005, 29).

Table 31.2 *The probability that firms develop a new product or a new service*

Variables	Odds-ratio estimate (1)	Coefficient estimate (2)	Odds-ratio estimate (3)	Coefficient estimate (4)
<i>STI Cluster</i>	3.529	1.2611**	2.355	0.8564**
<i>DUI Cluster</i>	2.487	0.9109**	2.218	0.7967**
<i>DUI/STI Cluster</i>	7.843	2.0596**	5.064	1.6222**
<i>Business services</i>			1.433	0.3599
<i>Construction</i>			0.491	-0.7120*
<i>Manuf. (high tech)</i>			1.805	0.5905*
<i>Manuf. (low and med. tech)</i>			1.250	0.2229
<i>Other services</i>			0.747	-0.2923
<i>100 and more employees</i>			1.757	0.5635*
<i>50–99 employees</i>			0.862	-0.1481
<i>Danish group</i>			0.859	-0.1524
<i>Single firm</i>			0.521	-0.6526*
<i>Customised product</i>			1.378	0.3203
Pseudo R ²	0.1247	0.1247	0.1775	0.1775
N	692	692	692	692

Note: ** = significant at the 0.01 level; * = significant at the 0.05 level.

Source: Based on Jensen et al. (2007).

This can be illustrated by data on innovation performance at the firm level; see Table 31.2. Based upon a unique combination of survey and register data for Danish firms we have demonstrated that firms that engage in R&D without establishing organizational forms that promote learning and neglect customer interaction are much less innovative than firms that are strong both in terms of STI and DUI learning (Jensen et al. 2007).

Table 31.2 refers to the outcome of an analysis of survey and register data for almost 700 Danish firms and it presents different variables related to the propensity to introduce new products or services (Jensen et al. 2007). Sector, size and form of ownership were used as control variables, but the focus was upon a variable indicating the mode of innovation in the firm. Firms that make only weak efforts to support science-based and experience-based learning are used as the benchmark (odds ratio = 1), and the odds-ratio estimate indicates how much higher the propensity to innovate is among firms strong in, respectively, one or both of the modes of learning. The results reported in Table 31.2 show that firms that combine the two modes are much more prone to innovate than the rest (see column 1). It shows that the effect also remains strong after introducing control variables related to size and sector (see column 3). Columns 2 and 4 show that the differences between modes are significant both with (column 4) and without (column 2) control variables.

As indicators of strong science-based learning were used the R&D expenditure, the presence of employees with an academic degree in natural science or technology, and the collaboration with scientists in universities or other science organizations. Indicators of experience-based learning were the use of certain organizational practices normally

connected with learning organizations such as ‘interdisciplinary workgroups’ and ‘integration of functions’ together with ‘closer interaction with customers’, to signal learning by interacting and a focus on user needs.

Firms that only made weak efforts to support science-based and experience-based learning were taken as the benchmark, and the odds-ratio estimate indicates how much higher the propensity to innovate is among firms strong in, respectively, one or both of the modes of learning. The results reported in Table 31.2 show that firms that combine the two modes are much more prone to innovate than the rest. It shows that the effect remains strong also after introducing control variables related to size and sector.

The analysis and results reported above point to the need to develop our understanding of how different forms of knowledge and different modes of innovation are combined in different national innovation systems. The analysis also explains why narrow definitions of national innovation systems that focus only upon science-based innovation are of little relevance for the economic performance of firms and national innovation systems. This is, not least, important when it comes to analysing the barriers and opportunities for economic development in poor countries, another challenge for innovation system research (Arocena and Sutz 2000; Cassiolato et al. 2003).

Understanding Knowledge and Learning

One important challenge for innovation system analysis is to deepen the understanding of how different kinds of knowledge are created and used in the process of innovation. Some elements of knowledge are local and tacit, embodied in people and embedded in organizations. Other elements are global, explicit and can easily be transferred from one part of the world to another. Different sectors in the economy and in society make use of different mixes of local and global knowledge; and in some areas, such as education and business consulting, it is especially difficult to codify the know-how that consultants and teachers make use of when they give advice and teach (OECD 2000).

Firms as Sites for Employee Learning

To understand how learning takes place within organizations as well as in the interaction between organizations is a key to understanding how systems of innovation work. While it is important to study national characteristics in terms of organizations that pursue R&D, it is equally important to study to what degree firms in different national systems give employees access to competence-building in connection with ongoing economic activities.

Lorenz and Valeyre (2006) show that there are dramatic differences between Europe’s national systems in terms of how and how much the average employee learns at their workplace. The majority of workers in the Netherlands, Denmark and Sweden are engaged in ‘discretionary learning’, where they combine learning through problem-solving with a certain autonomy in their work situation. This contrasts with countries such as Greece, Portugal and Spain, where Taylorist types of work with much more limited opportunities for learning and with very little autonomy are much more frequent. The distinction between discretionary learning, lean production and Taylorism refers to

Table 31.3 National differences in organizational models (% of employees by organizational class)

	Discretionary learning	Lean production learning	Taylorist organization	Simple organization
North				
The Netherlands	64.0	17.2	5.3	13.5
Denmark	60.0	21.9	6.8	11.3
Sweden	52.6	18.5	7.1	21.7
Finland	47.8	27.6	12.5	12.1
Austria	47.5	21.5	13.1	18.0
Centre				
Germany	44.3	19.6	14.3	21.9
Luxemburg	42.8	25.4	11.9	20.0
Belgium	38.9	25.1	13.9	22.1
France	38.0	33.3	11.1	17.7
West				
UK	34.8	40.6	10.9	13.7
Ireland	24.0	37.8	20.7	17.6
South				
Italy	30.0	23.6	20.9	25.4
Portugal	26.1	28.1	23.0	22.8
Spain	20.1	38.8	18.5	22.5
Greece	18.7	25.6	28.0	27.7
EU-15	39.1	28.2	13.6	19.1

Source: Lorenz and Valeyre (2006).

different degrees of worker autonomy, and it may be argued that the three forms represent different levels of quality of working life.

Table 31.3 shows that people working in different national systems of innovation and competence-building have very different access to learning by doing. It also shows that at lower income levels the bigger proportion of the workforce work in either simple or Taylorist organizations. The richer the country, the more workers are employed in discretionary learning contexts. But it is also important to note that countries at similar income levels – Germany and the UK – have quite different distributions of workers between the four forms. While the proportion of workers operating under lean production is more than 40 per cent in the UK, it is less than 20 per cent in Germany. The micro-foundation of national systems of innovation differs not only because of levels of income but also because of other systemic features.

In a follow-up to the analysis of these national patterns of workplace learning they have been combined with innovation indicators. The analysis shows that on average countries that make intensive use of discretionary learning are most prone to engage in ‘endogenous innovation’ (defined as innovations that emanate from in-house R&D efforts and result in products new to the market). See Figure 31.1, which shows the

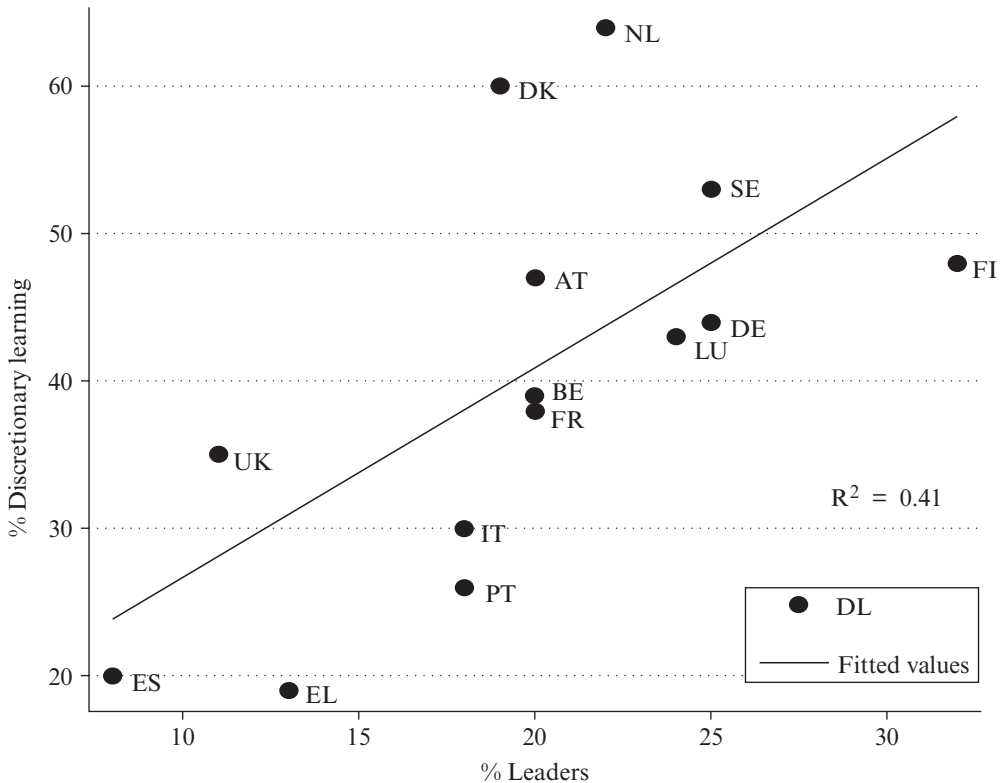


Figure 31.1 Discretionary learning and leading innovators

proportion of 'lead innovators' among firms and the share of workers engaged in discretionary learning (Arundel et al. 2007).

Figure 31.1 shows that there is a tendency for countries hosting lead innovators to have a bigger share of workers engaged in the discretionary learning mode. The analysis indicates that national differences in what people do and learn at their workplace is a major factor structuring the national innovation system and affecting its performance. It is certainly more difficult to change than, for instance, R&D intensity, but it is also more fundamental and more deeply rooted in the industrial history of the country.

National Systems of Innovation and Economic Development

While the modern version of the concept of national systems of innovation was developed mainly in rich countries (Freeman 1982; Freeman and Lundvall 1988; Lundvall 1992; Nelson 1993; Edquist 1997), some of the most important elements actually came from the literature on development issues in the Third World. For instance the Aalborg version (Andersen and Lundvall 1988) got some of its inspiration concerning the interdependence between different sectors from Hirschman (1958) and Stewart (1977). Other encouragements came from Myrdal (1968).

Most of the studies of national systems treat the innovation system as an *ex post* concept. Often the concept refers to relatively strong and diversified systems with well-developed institutional and infrastructural support of innovation activities. The perspective is one where innovation processes are evolutionary and path-dependent and systems of innovation evolve over time in a largely unplanned manner. The system-of-innovation approach has not, to the same extent, been applied to system-building. When applied to the South the focus needs to be shifted in the direction of system construction and system promotion – something that was central in List's ideas for catching-up – and to the fact that public policy is a conscious activity that needs to stimulate and supplement the spontaneous development of systems of innovation (Muchie et al. 2003; Lundvall et al. 2006).

Another weakness of the system-of-innovation approach is that it is still lacking in its treatment of the power aspects of development. The focus on interactive learning – a process in which agents communicate and cooperate in the creation and utilization of new, economically useful knowledge – may lead to an underestimation of the conflicts over income and power, connected to the innovation process. In a global context where the access to technical knowledge is becoming restricted not only by weak 'absorptive capacity' but also by more and more ambitious global schemes to protect intellectual property, this perspective gives a too-rosy picture. Post-colonial and class privileges may block learning possibilities, and existing competences may be destroyed for political reasons related to the global distribution of power.

Furthermore, the relationships between globalization and national and local systems need to be further researched. It is important to know more about how globalization processes affect the possibilities to build and support national and local systems of innovation in developing countries (Lastres and Cassiolato 2005). 'Borrowing' and adapting technologies that the technological lead countries control today is an important key to development. The combination of reverse engineering, licensing, sending scholars abroad, inviting foreign firms and experts, and engaging in international scientific collaboration may be difficult to achieve, but all these elements need to be considered in building the national innovation system. When building such systems it is a major challenge to develop national strategies that make it possible to select technologies and institutions from abroad that support innovation and competence-building.

It is thus clear that the innovation system approach proposed here needs to be adapted to the situation in developing countries, if it is to be applied to system-building. It is also clear that what is most relevant for developing economies is a broad definition of the NSI, including not only low-tech industries but also primary sectors such as mining and agriculture. Activities contributing to competence-building need to be taken into account, and narrow perspectives that focus only on the STI mode should be avoided.¹⁵ These topics are reflected in the research agenda of the global research network on innovation systems and development: Globelics (see Box 31.2).

¹⁵ Several authors analysing the situation of less-developed countries have been critical of the use of the concept of the 'national innovation system' and have preferred to work with concepts such as 'national technological systems' (Lall and Pietrobello 2003) or 'national learning systems' (Mathews 2001; Viotti 2002). To some degree I see their alternative conceptual proposals as reactions to the use of narrowly defined innovation systems with a focus on STI-based learning. I strongly support the idea that understanding processes of experience-based learning is a key to the understanding of the specificities of national innovation systems (see Lorenz and Lundvall 2006).

BOX 31.2 THE GLOBELICS EXPERIENCE

Globelics is a global research community combining scholars working on innovation studies with scholars working on development studies. It has been characterized as a network for 'researchers without borders' (www.globelics.org). The Globelics annual conferences take place in developing countries, and the financing has been raised within the hosting country.

The purpose of Globelics is to counterbalance the increasingly uneven global access to research networks. It gives scholars in less-developed countries access to the most recent research and it opens up channels for publication of their work. It also makes it possible to share experiences among scholars from different parts of the developing world, by-passing the metropolises in the North. Several major research projects with global scope use Globelics as their host – the Catch-Up project coordinated by Richard Nelson, the BRICS Project (Brazil, Russia, India, China, South Africa) coordinated by Jose Cassiolato, and the Unidev project (Development Education in Theory and Practice) coordinated by Claes Brundenius.

One major long-term positive effect is that young scholars from all parts of the world, sometimes working in isolation and under difficult conditions, gain inspiration and support in their effort to do good research on innovation. There is already a lively 'Globelics community' of young scholars who correspond regularly with each other on both a scientific and a social basis.

CONCLUSIONS

In this chapter I went back to the origin of the concept of the national innovation system. I have argued that the original versions as developed by Christopher Freeman and the Aalborg group are more adequate tools when it comes to linking innovation to aggregate national economic performance than narrow versions that focus mainly on the science base. In the current era there is a need both for strengthening the science base and for promoting experience-based learning. This is absolutely fundamental when it comes to linking the analysis of national innovation systems to economic development.

This implies new directions for research on innovation systems. First, it is necessary to develop a better understanding and more efficient analytical techniques to study institutional complementarity and mismatch in innovation systems. Second, there is a need to deepen the understanding of the production, diffusion and use of knowledge. In this connection the focus should be on interactive learning processes and upon how social capital evolves as a basis for interaction within and across organizational boundaries. Third, there is a need to understand and develop indicators of how and to what degree workplaces function as learning sites in different national systems. Fourth, a promising research strategy is to link organizational learning, mobility of people and network formation. Networks will always involve interaction between people, and the specific career will have an impact on how and with whom agents interact.

Today, as compared to the original 1992 approach, I would emphasize even more the importance of human resources. While one aspect of globalization is that codified knowledge moves quickly across borders, the most localized resource remains people, their tacit knowledge, their network relationships and their accumulated organizational experiences. Therefore all parts of the innovation system that contribute to competence-building are becoming increasingly important for national performance.

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32. Latecomer industrialization

*John A. Mathews**

INTRODUCTION

The world is in the grip of a ‘great convergence’ according to the *Financial Times*, where the divergence between East and West that opened up with the industrial revolution is now being closed again.¹ China is the great game-changer that is driving this realignment. Through three decades of economic growth that has averaged 9.9 percent per annum, it has engineered in 30 years what took two centuries in the West and a half-century in Japan. Scholars fall over themselves to find superlatives to describe this transformation that is lifting hundreds of millions of people out of poverty. Dani Rodrik calls it the ‘most potent poverty reduction engine the world has ever known’.² The World Bank tries to appropriate the China ‘miracle’, claiming that China vindicates its focus on the use of markets while ignoring the fact that it has utilized its strong state to drive the relentless restructuring of its economy.³

In this chapter I reflect on the China experience, characterizing it as the most recent (and most important) case of late industrialization, taking my terminology from Alexander Gerschenkron and Alice Amsden. I wish to fit the China case into a process of diffusion of industrial development that has been under way for 200 years now, where the patterns of growth of the latecomers differ substantially from those that came earlier. Gerschenkron (1962) in his pathbreaking characterization of latecomer industrialization (drawing on nineteenth-century European economic history) drew attention to specific features whereby the countries industrializing later would have to adopt different characteristics depending on their degree of ‘backwardness’ (or late arrival). Germany was his prime case of a country that was relatively late compared with the first mover, Britain, and utilized tailored financial institutions such as industrial banks (the Deutsche Bank) to channel household savings towards investment in the new science-based industries. Russia was his counter-case, where its ‘extreme backwardness’ meant that it had to rely on the state to furnish collective entrepreneurial powers and the Ministry of Finance to furnish investment finance – but this was not sufficient to save Russia from the Bolshevik revolution of 1917.⁴ Amsden, by contrast, applied the distinctive pattern of late industrialization

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¹ See Martin Wolf (2011), ‘In the Grip of a Great Convergence’, *Financial Times*, 4 January. Available at <http://www.ft.com/intl/cms/s/0/072c87e6-1841-11e0-88c9-00144feab49a.html#axzz3BqqinvRa> (accessed 20 August 2014). This column sparked the title for the recent book by Kishore Mahbubani (2013).

² See Rodrik (2010, 91).

³ See Ali Zafar (2010), ‘Learning from the Chinese Miracle: Development Lessons for Sub-Saharan Africa’, Policy Research Working Paper 5216, World Bank. Available at <http://elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-5216> (accessed 20 August 2014).

⁴ See Gerschenkron (1962), as well as other works such as Gerschenkron (1970).

to the twentieth-century cases of successive success stories from East Asia, where Korea, Taiwan and Singapore all in their different ways built on the prior success of Japan in fashioning developmental states that shaped and drove their accelerated industrialization and catch-up with the West. Her principal contribution was to argue that the East Asian successes all avoided problems of 'government failure' with their state-centric industrialization models through the use of innovative reciprocal control mechanisms. Amongst many examples, the performance targets set for export firms that would have to be attained in order to continue government support stand out as particularly effective.⁵

My purpose in this chapter is to 'normalize' the notion of late industrialization, amassing the evidence that would make it seem the inevitable and natural choice for developing countries in the twenty-first century. Amsden famously asked, 'Why isn't the whole world experimenting with the East Asian model to develop?', at a time when it seemed that the World Bank and the Washington Consensus would prevail indefinitely.⁶ But now, unexpectedly, her question has a clear answer. The 'world' is indeed following the East Asian model, and the leader in this process is China. As China appropriates more and more features of the East Asian developmental model, so it sets a template that other countries – India and Brazil notably, and others beyond these – are likely to follow, bringing more and more of the world into the orbit of the income- and wealth-raising processes of industrialization. Seen from such a perspective, it would no longer seem strange that late industrializing countries might make extensive use of a developmental state, to guide and coordinate the processes of investment in new industries. It would not seem strange that such countries might focus their efforts initially on building a 'modern' industrial sector based on manufacturing, because that is where it is known that increasing returns based on productivity growth are manifested, and where forward and backward linkages to the rest of the economy are generated. Nor would it seem strange that such countries might utilize all the tools available in the 'industry policy' toolkit to drive their structural transformation. Nevertheless such approaches, logical and historically justified as they might be, always have to be defended against the deadweight of orthodox economic opinion.

I aim to summarize the Gerschenkron–Amsden theses and review the evidence as to their validation in the recent experiences of East Asia and now in those of China, India, Brazil and others; an important exercise, and one that should be the never-ending prime focus of the United Nations (UN) development agencies – the United Nations Industrial Development Organization (UNIDO), United Nations Conference on Trade and Development (UNCTAD) and the United Nations Development Programme (UNDP). Beyond that, I address four challenges. First, I wish to embed the idea of late industrialization in the most appropriate theoretical models of economic growth, namely those based on circular and cumulative causation (Kaldor's growth laws and Thirlwall's demand-side models of growth, as opposed to the supply-side constraints emphasized in mainstream growth models as well as the new models of endogenous growth) – a task that successive development theorists have shied away from. Second, I wish to emphasize the strategic character of development choices and embed the process in the relevant strategy

⁵ See Amsden (2001), as well as earlier articles such as Hikino and Amsden (1994), Amsden (1994) and later studies including Amsden (2003).

⁶ See Amsden (1994); her article was one of a number commissioned by the journal *World Development* to respond to the *East Asian Miracle* report.

literature (and in particular in the concept of resource leverage, introduced by Hamel and Prahalad 1993). In strategy, resource leverage is applied at the level of the firm, giving rise to a concept of the 'latecomer firm' – but it is equally relevant to the notion of the latecomer state – as alluded to by Amsden but ignored in much of the development literature. Third, I wish to review the role of institutional factors in successful late industrialization, characterizing what is known about state involvement and developmental ideology in successful cases. Finally, I wish to bring the whole notion of late industrialization 'up to date' by pointing to the limits of an industrialization strategy based on intensification of fossil fuel sources and resource throughput. This raises the issue of the greening of development strategy, in order to fashion a version of industrialization that does not cost the earth. China, again, is leading the way with its targeting of green growth and new industrial sectors based on renewable energies and clean technologies, in an explicitly 'green' industrial policy framework. But at the same time China is also ramping up its 'black' economy based on fossil fuel inputs, and the outcome of the contest between its green and black industrialization strategies is anything but determined.

THE GREAT CONVERGENCE: CHINA'S RISE AND THE DIFFUSION OF INDUSTRIALIZATION

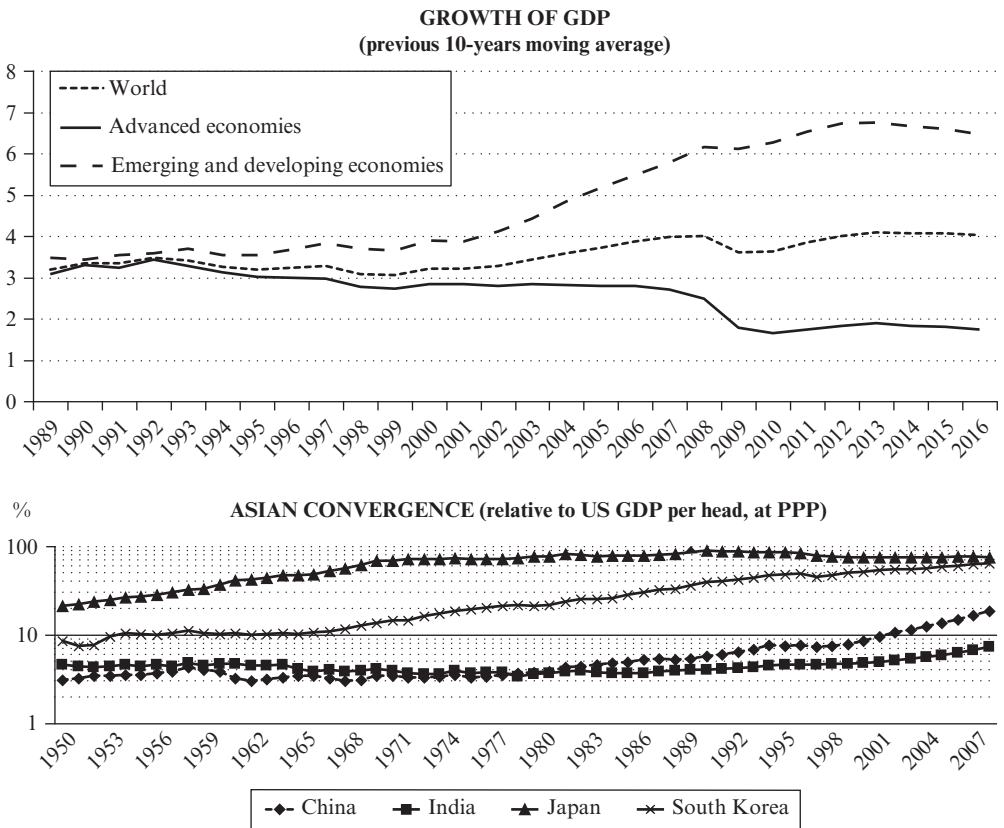
Britain and then other Western countries pulled away decisively from both China and India in the eighteenth century in what historians such as Pomeranz (2000) term the Great Divergence. This has been the single most important feature of the world system for the past 250 years, accounting for the current distribution of wealth and power that so favors the West. But in the twentieth century we saw a resurgence of East Asia, and now in the twenty-first century we are already starting to see a 'Great Convergence', as China (and to some extent India) employ catch-up strategies to catch up with the Western leaders.⁷ This may be seen as the dominant process of our time.⁸ China became the world's largest exporter in 2009, beating Germany, and the world's largest manufacturing country in the year 2010.⁹ On the negative side, it has also become the world's largest emitter of carbon dioxide, the principal greenhouse gas identified by the Intergovernmental Panel on Climate Change (IPCC) as a source of 'anthropogenic' climate change, an issue I shall come to later in this chapter.

China is now converging back on the West in the twenty-first century; that is, reversing the previous Great Divergence. Figure 32.1a reveals that China has outperformed all the world's economies in terms of GDP growth in the 21st century, while Figure 32.1b

⁷ Arrighi et al. (2003) provide a welcome historical perspective on the 'resurgence of East Asia', which they view as a common effort spanning several countries.

⁸ Four of these fast-growing economies (Brazil, Russia, India and China) were famously labelled as the BRIC countries by Goldman Sachs in 2001; and they have lived up to their name as the fastest-growing nations on the planet over the past decade. I use the term BICs to indicate Brazil, India and China which are all utilizing non fossil fuel energy sources, as distinct from Russia.

⁹ In 2010, China displaced the US as the world's top manufacturing nation, ending the US reign of 110 years. See Peter Marsh (2011). 'China Noses ahead as Top Goods Producer'. *Financial Times*, 14 March. Available at <http://www.ft.com/cms/s/0/002fd8f0-4d96-11e0-85e4-00144feab49a.html#> (accessed 20 August 2014).



Source: IMF, WEO database.

Figures 1a and b The great convergence: emerging economies' performance

shows how China is following in the footsteps of Japan and then Korea in closing the gap with the US in terms of per-capita income. The chart indicates that Japan's and Korea's past performance is the trajectory that the Chinese leadership clearly intend to pursue. As Martin Wolf of the *Financial Times* puts it, this 'great convergence' that is reversing the previous 'great divergence' is 'far and away the biggest single fact about our world'.¹⁰

China has powered this transformation through its increasing dominance of world trade. Figure 32.2 reveals that in the case of Brazil's trade, its exports to the European Union (EU) have held steady while its exports to the United States (US) have declined (relatively) and its exports of raw materials to China have been steadily growing (relatively), overtaking the share to the US in 2009 and reaching more than 30 percent of Brazil's exports by 2010. Brazilian scholars are now referring to Brazil's

¹⁰ See Martin Wolf (2011). 'In the Grip of a Great Convergence'. *Financial Times*, 4 January.

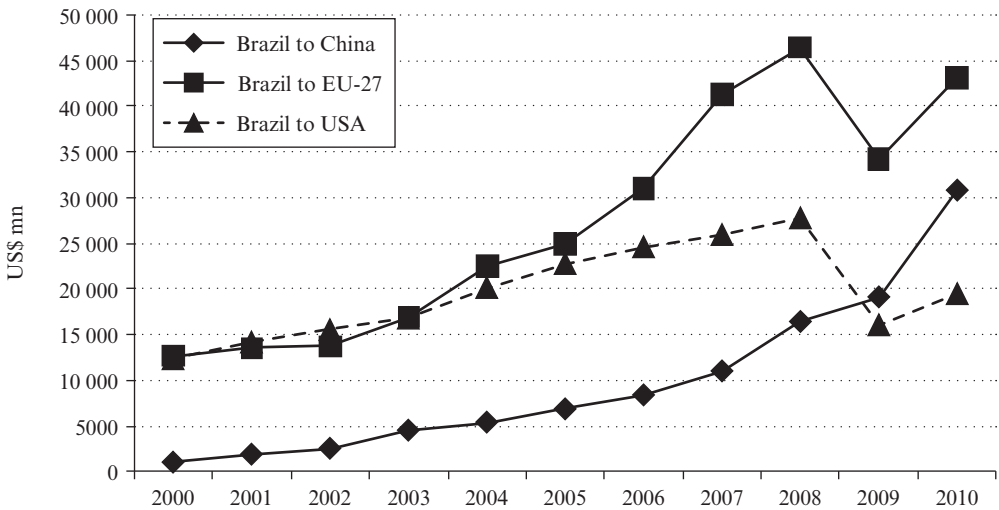


Figure 32.2 *Brazil's exports to EU, US and China*

place in a 'Sinocentric world', indicating how quickly they have made the intellectual adjustment.¹¹

It is no accident that China is converging in this way on the Western leaders and on its trailblazers from East Asia. China's strategy has been to focus on manufacturing as the driver of its growth; indeed manufacturing (factory production) in China has grown at close to an average of 15 percent per annum, driving the overall growth rate close to 10 percent. The data tell the story. China's manufacturing output (in 1990 prices) rose from \$47 billion in 1980 at the start of the opening reforms to \$882 billion by 2005, a nineteenfold expansion over 25 years (see Anantaram and Saqib 2010, 123, Table 2). Growth reached 14.4 percent by 1985 and 17.7 percent by 1995, before moderating to 10.2 percent in 2000 and 10.9 percent in 2005. In this way, manufacturing has truly been the engine of growth in China, driving productivity increases as well as a widening trade surplus. After the disaster of the Maoist Great Leap Forward, China's strategy since 1980 has been to first build its labor-intensive industries and exports (and coming to dominate many of the global markets in these products). Indeed China's trade surplus has been driven almost entirely by its manufactured goods. This growth has been driven by the high levels of investment (exceeding 20 percent in most years), which in turn is based on a high level of savings and retained earnings. By contrast with earlier experiences of Germany and Japan, where finance was mobilized for investment by new institutional vehicles such as industrial banks (Germany) or *keiretsu* banks (Japan), in China financing has so far been ad hoc, drawing on the country's high level of savings as well as controlled amounts of foreign direct investment (FDI); by the 2000s, China was accounting for more of the world's FDI than any other country. Only in the 2000s did banks and

¹¹ 'Brazil's Place in a Sinocentric World' was the title of a conference staged in Rio de Janeiro in 2009, where I was privileged to make a presentation. For the first use of the term, see Castro (2008).

public sources of funding start to play a role typical of earlier late industrializers.¹² China also provides an exemplary case of a latecomer building strong technological capabilities that provide a foundation for future innovation.¹³ It is moving its industrial and energy systems to a sustainable footing.¹⁴ India is also opening up and raising its growth rates (achieving an average annual growth of 8.5 percent over the eight years from 2003–04 to 2010–11), again lifting hundreds of millions of people out of poverty, with reforms emulating those implemented in China and lagging behind them by about a decade.¹⁵

Prior East Asian Industrialization

There should be no surprise at China's success, given that it is built squarely on the prior experiences and successes of China's East Asian neighbors. But the discussion of East Asian success has been a fraught affair, with two quite distinct periods: prior to the Asian financial crisis of 1997, and post-crisis. The cases of Japan and then the East Asian 'tigers' have always stood as a powerful critique of the dominant neoclassical economic orthodoxy: both because their success owed so little to orthodox prescriptions (captured in the World Bank's 'market-conforming' prescriptions and the elements of the Washington Consensus), and because their analysis made little sense without acknowledging the role of industrial policy and the role of a developmental state. Both are anathema to the economic orthodoxy. After the 'revisionist' accounts of Japan's success came the revisionist accounts of Korea (e.g. Amsden 1989) and Taiwan (Wade 1990). The heated debate stirred up by these accounts led to the production by the World Bank of its 1993 *East Asian Miracle* report, a complex and artful exercise in what Lall (1994) called intellectual camouflage, seeking to avoid any acknowledgment of the role of developmental state institutions and practices while discussing their effects. Amsden (1994) went further and described the report as narcissistic, in the sense that the Bank looked at East Asian success and saw only its own reflection, in the form of market-guided policies. Of course it was possible to do this because the East Asian success stories were indeed guided by markets, in the sense that their goal was to catch up and to become more like the advanced economies as fast as possible. But the means to do so were anything but orthodox, which also had to be acknowledged. The latest in this line of papers was the masterful summary of East Asian practices by Stiglitz (1996), delivered on the very eve of the Asian financial crisis, and tarnished by its total failure to anticipate any such crisis.

While the Asian financial crisis was a disaster for the region, hitting countries such as Thailand and Indonesia very hard and driving Korea into the arms of the International Monetary Fund (IMF), its role in weakening the case for 'East Asian'-style developmentalism has nevertheless been overstated. The point is surely that Korea had shaken off the crisis within two years at most and was back in its stride by the year 2000, paying off the IMF

¹² On the financing of German and Japanese industrialization, see Lazonick and O'Sullivan (1997). On the anomalous financing of China's later industrialization, see Chen and Shin (2011).

¹³ On China's strategies of innovation, which are firmly grounded in its manufacturing capabilities, see Breznitz and Murphree (2011).

¹⁴ See my studies on these points with my collaborators: Hu and Mathews (2008) on China's national innovative capacity; Mathews and Tan (2012) on China's energy transformation; and Wu and Mathews (2012) on technological dynamics in the East Asian solar photovoltaic industry.

¹⁵ On India's growth and its opening up to the world economy, see Bhagwati and Panagariya (2013).

loans and powering ahead in new technologies and industries such as telecoms and now, more recently, in green low-carbon technologies. Taiwan was barely affected at all. But the most important country to suffer virtually nothing from the crisis was China itself, which emerged stronger and with a distinct competitive advantage over its Asian low-wage competitors such as Thailand, Malaysia and Indonesia. And it was stronger because it ignored all the nostrums of the Washington Consensus: it maintained state controls over inflows of financial capital and over its exchange rate; it allowed a booming export sector to grow, based on labor-intensive manufacturing; it drove the restructuring and upgrading of industries with developmental state institutions and practices. And then – the third major milestone after the opening of the economy in 1979 and the escape from the financial crisis in 1997 – China joined the World Trade Organization (WTO) in 2001, and its economy really took off. The Eastern cities and provinces drew on vast interior regions with an ‘infinite’ labor supply (to use Lewis’s evocative phrase from 1954), yet were growing so rapidly that the country passed the ‘Lewis turning point’ where labor starts to become scarce and wages rise, probably early in the 2000s (Zhang et al. (2011) estimate 2003). The way is now clear to developing a sober assessment of the real East Asian development gains, including the recent gains made by China, as a template and model for development strategies overall.¹⁶

There is a pattern to these developments that the great economic historian Alexander Gerschenkron termed the ‘latecomer effect’. How robust is this concept and to what extent can it be seen to provide an explanatory framework for the rise of China in the post-1997 era?

Gerschenkron-Amsden Late Industrialization – and Limitations

Gerschenkron (1962) opened up a field of study in late industrialization that has since flourished.¹⁷ He himself expanded his pattern of latecomer industrialization into some generalizations, or propositions, based on European nineteenth-century economic history – which were, in principle, testable. Two students of Gerschenkron, Richard Sylla and Gianni Toniolo, summarized his approach in the form of seven generalizations or succinct propositions, as follows.

The more backward a country:

1. the more rapid will be its industrialization, that is, the faster will be its rate of growth of industrial production;
2. the greater will be its stress on producer (capital) goods as compared with consumer goods;
3. the larger will be the typical scale of plant and firms, and the greater will be the emphasis on latest, up-to-date technology;
4. the greater will be the pressure on the consumption levels of the population: consumption levels will be squeezed to promote a high rate of capital formation;

¹⁶ For an excellent summary of East Asian development gains, including the role now played by China, see Storm and Naastepad (2005).

¹⁷ For recent samples from this flourishing literature on late industrialization, see Hobday (2003), Shin (2005), Austin (2010), Austin and Sugihara (2013) and Storm (2011), as well as my own contributions in Mathews (1998, 2001, 2005a, 2005b, 2006) and Mathews and Cho (1999, 2000).

5. the lesser will be the role of the agricultural sector as a market for industrial goods and as a source of rising productivity in its own right;
6. the more active will be the role of special institutional factors – large banks as in Germany, the government Ministry of Finance as in Russia – in supplying capital and promoting industrialization; and
7. the more important will be ideologies of industrialization (developmentalism) in the shaping of policies and events. (Sylla and Toniolo 1991, 5)

These propositions follow closely the exposition of Gerschenkron himself, with some added clarity. Gerschenkron stresses that the key point is not that latecomer industrialization depends on any one of these steps, but that it constitutes a distinctive pattern of institutional innovation and sectoral sequencing. The more backward a country, the more it has to find substitutes for the institutions or practices found already in the advanced countries; hence the rising role of the state and banks in providing finance and entrepreneurial direction as the latecomer industrializes. Gerschenkron's famous examples were the innovation of an industrial bank in the cases of Germany (Deutsche Bank, channeling savings into investment flows to industry on a scale beyond that achieved in the earlier commercial banking practices of Britain) and of Russia (the role played by the Ministry of Finance in the 1890s).

Hence, as opposed to the uniform and homogeneous pattern of development as laid out by Rostow (1959) in his 'stages of economic growth' (one that suppresses all the interesting features), the schema presented by Gerschenkron is that latecomer industrialization is a distinctive and *sui generis* pattern, and one which helps to explain why some countries succeed and others fail to industrialize. Gerschenkron left the matter at the close of the nineteenth century in Europe. He made no attempt to apply his framework to the case of Japan, nor to the cases of the East Asian 'dragons' – Korea, Taiwan, Singapore – which all came to prominence after he was writing.

It was the Massachusetts MIT scholar Alice Amsden who took up the cause of 'late industrialization' and applied the framework most incisively to the East Asian experience.¹⁸ Taking her cue from Gerschenkron, Amsden (2001, 284) states: 'the later a country industrializes in chronological history, the greater the economic interventions of its government'. This is certainly validated with the successful cases of East Asia, where their primary creation was the 'developmental state', as first theorized by Chalmers Johnson in his 1982 masterpiece.¹⁹ Amsden was at pains to point out that early industrializers also utilized institutional innovations and state agencies to drive their own transition; and emphasized that it may not be that late industrializers have more state intervention, but simply state intervention of a different kind. This is consistent with the emphasis on the developmental state as providing a distinctive pattern for late industrialization.

¹⁸ Amsden produced many works on East Asia, including her much-cited studies of Korea (Amsden 1989) and of East Asian patterns more generally (Hikino and Amsden 1994; Amsden and Chu 2003). But her magnum opus is undoubtedly Amsden (2001) with its obvious play on titles that encompass 'the rise of the West', and its positioning as a study of the rise of East Asia as constituting a distinctive pattern of 'late industrialization'.

¹⁹ Latecomer industrialization should really be termed the 'Johnson–Amsden–Gerschenkron' framework, because the concept of the developmental state is so central in the theory and in accounting for the successful East Asian cases.

What marks out Amsden's contribution as having a distinctiveness of its own, and going beyond both Johnson and Gerschenkron, is her emphasis on late industrializers employing reciprocal control mechanisms. These are designed to curb any propensity for rent-seeking as state involvement in the economy increases. The most famous example would be the use of exports as a performance standard in Korean and Taiwanese industrialization, whereby government support for firms entering new industries (for example, through subsidies or tax breaks) had to be validated through the firms achieving designated export performance targets; failure to meet the targets would lead to withdrawal of the favored status. This proved to be a powerful means of disciplining both sides of the relationship, involving government and firms.

Amsden captured this two-sided character in her notion of reciprocal control mechanisms (RCMs) which lay at the heart of a new, innovative economic model employed by late industrializers. As she put it: 'Subsidies ("intermediate assets") were allocated to make manufacturing profitable – to facilitate the flow of resources from primary product assets to knowledge-based assets – but did not become giveaways. Recipients of intermediate assets were subjected to *monitorable performance standards that were redistributive in nature and results-oriented*' (Amsden 2001, 8). As such, these monitorable performance standards minimized government failure and rent-seeking, which would otherwise plague countries deploying a developmental state.

The concept of RCMs may be taken as the centerpiece of what I am proposing be called 'Gerschenkron–Amsden latecomer industrialization' as a distinctive pattern of history and a framework for strategizing. My argument is that this set of ideas provides the most plausible account of the Great Convergence that is now under way, bringing China, India, Brazil and others into the orbit of the advanced industrial world. Gerschenkron's basic proposition is that latecomers deploy their own specific patterns of industrialization in order to catch up, focused mainly on the state (Johnson's 'developmental state') and state entrepreneurship and finance, with these compensatory institutions playing increasingly significant roles the later the country comes to the industrial scene. Amsden's fundamental addition, based on the study of the East Asian experience, is that successful late industrializers deploy sophisticated reciprocal control mechanisms in order to stave off the rent-seeking and cronyism that would otherwise accompany strong involvement of the state in the economy; and that devising such RCMs becomes more important the later the country comes to the industrialization process.

Application of the Gerschenkron–Amsden Framework to China

An initial evaluation of the Gerschenkron propositions in testing them against the experience of China (currently the main late-industrializing nation, and the largest), generates some clear results:

- Speed of catch-up or rate of growth. Gerschenkron's emphasis on speed of catch-up is validated in the case of China which is certainly an exemplary case of rapid growth and catch-up; but others, such as India and Brazil, do not fit this generalization. In general, all that can be said is that rapid growth (particularly of manufacturing industry) is a sensible strategy for the late industrializer to pursue.

- Primary stress on producer goods as compared with consumer goods. This is definitely not validated by China, nor by most of the East Asian experiences as well. Taiwan, China and even to some extent Korea all benefited from building early labor absorption industries around consumer goods, if not for the domestic market then for the world market. Producer goods industries came in time (for example, Japan's and then Korea's 'heavy and chemical industrialization') but only after the early light industries had been established.
- Exploitation of greater scale and latest technology. This feature is largely vindicated. All the East Asian cases and certainly China have focused on mass production industries which enjoy cost-reduction tendencies through learning effects and economies of scale. This approach has been combined with leapfrogging approaches to the world stock of technology, pursuing what may be described as 'fast-follower' strategies leading their firms to the technological frontier.
- Squeezing of consumption (and financial repression). This has certainly been strongly the case in China, and to a large extent in the East Asian cases as well.
- Declining role of the agriculture sector. This is definitely validated, since in each case (including China) there has been a drastic shift out of agriculture and rural industries generally. Whereas traditional development theory saw agriculture as providing an early market for manufactured industrial goods, in the East Asian cases (including China) it is the world market that has provided the proxy for domestic agricultural demand.
- Use of special institutional factors. Again, this is certainly validated, captured by the notion of the developmental state. This institutional innovation embodies an ideology of developmentalism; and beyond that, an acceptance of the necessary controls, that is, Amsden's reciprocal control mechanisms.

Thus we find partial correlation between Gerschenkron's original exposition of a set of principles (or 'stylized facts') concerning late industrialization, extending the experience set from Europe in the nineteenth century to East Asia in the twentieth century and now to China in the twenty-first century. But the anomalies indicate that the Gerschenkron–Amsden late industrialization framework needs some updating and repair. I tackle this task under four heads, relating to the economic, strategic and organizational aspects of late industrialization, as well as to its greening to take account of the limits now evident to an industrialization strategy based on dependence on fossil fuels and an assumption of infinite resource extraction and endless substitution.

MANUFACTURING AS THE ENGINE OF DEVELOPMENT AND GROWTH

While Gerschenkron, Amsden and Johnson all made fundamental contributions to understanding the distinctive patterns of latecomer industrialization, they did not attempt to ground the framework in economic development theory.²⁰ Nor do the principal

²⁰ One is reminded of the joke made at economists' expense, where a businessman and an economist are dis-

contributors to development theory make much effort to link their insights to latecomer industrialization. So here is a first gap or connection failure that needs to be remedied.

It is no accident that all the successful cases of latecomer industrialization, encompassing Japan, then the East Asian tigers, then South-East Asian newly industrializing economies (NIEs), and now China and others, have all been focused centrally on manufacturing; or, to the extent that primary production remains important, on adding value to primary production through further processing. This is based on the central proposition that manufacturing is a very special kind of economic activity, one which is capable of generating increasing returns (through lowered costs) rather than the diminishing returns which prevail in primary production (agriculture, minerals extraction). Manufacturing generates multiple linkages that spawn multiplier effects, or what would be called in cybernetic terms systemic effects, as captured in notions such as forward and backward linkages and the 'big push'.²¹ For centuries, there has been a focus on manufacturing as the generator of increasing returns (or rising productivity) as the key to the structural change associated with industrialization.²²

Rather than base this insight on an abstract economic model of growth, it is more sensible to seek to ground it in empirical observation. This is exactly what was done by Nicholas Kaldor, arguably one of the greatest economists of the twentieth century and the one whose insights may be viewed as underpinning the entire strategy of late industrialization.²³ Kaldor captured the essence of the empirical history of Atlantic industrialization in the form of three generalizations, or 'laws', which (of course) came to be known as Kaldor's laws. These are:

1. There exists a strong positive correlation between the growth of manufacturing output and the growth of gross domestic product (GDP); that is, manufacturing is the 'engine of development'.
2. There exists a strong positive correlation between the growth of manufacturing output and the growth of (labor) productivity in manufacturing; that is, manufacturing is driven by increasing levels of skill or knowledge, and not by increasing levels of resource throughput.
3. There exists a strong positive relationship between the growth of manufacturing output and the growth of productivity outside of manufacturing; that is, manufacturing has spillover effects that drive the development of all industrial sectors.²⁴

cussing the businessman's successful innovation, and the economist comments, 'That's all very well in practice – but does it work in theory?'.

²¹ Early development theorists called attention to such systemic effects as forward and backward linkages (Hirschman 1958); the 'big push', meaning a coordinated investment push across several sectors simultaneously (Rosenstein-Rodan 1943); and investment surge (Nurkse 1953).

²² See Reinert (2007) for a comprehensive discussion, including references to earlier European scholars, such as the Italian Antonio Serra, whose works collectively are referred to as 'The Other Canon'. On Serra and his *Breve Trattato* in particular, see Reinert and Reinert (2003), and for the first complete English translation by S. Reinert, see Serra (2011 [1613]).

²³ See Kaldor's lectures delivered at Cornell University in October 1966 (Kaldor 1967) as probably his clearest exposition, as well as Kaldor (1970). Thirlwall (1983) remains the most lucid account of Kaldor's laws. It is unfortunate that Amsden (2001) makes no reference to Kaldor nor to Thirlwall.

²⁴ See Thirlwall (1983; 2002; 2006, 117) for a basic and clear exposition.

Kaldor's laws provide a description of how an advanced economy really works (as opposed to the fictions of the neoclassical synthesis), as well as a template for the developing economies. The first law states in effect that it is manufacturing that drives growth (the faster the rate of growth in the manufacturing sector, the faster the rate of growth of GDP). This is the basis for claiming that manufacturing (as opposed to agriculture or extractive industries) is the engine of growth and drives development. It does so for reasons that are well understood (if little discussed in mainstream economics): namely, that manufacturing embodies forward and backward linkages that generate increasing returns.²⁵ Productivity enhancements are propagated through the entire system like a chain reaction, to use Kaldor's graphic metaphor.

The second law states that the faster the rate of growth of manufacturing output, the faster is the rate of growth of labor productivity in manufacturing – through the action of static and dynamic economies of scale, forward and backward linkages, or increasing returns. This second law may be said to embody Young's insight that it is mutual interaction between the supply side and demand that generates growth.²⁶ Demand induces greater specialization which, in turn, generates greater productivity and this translates into expanded markets which, in turn, induce further specialization; and so on, round and round, in a process of circular and cumulative causation. This relationship between manufacturing output and productivity growth is known (following Kaldor) as Verdoorn's law.

The third law then states that the faster the rate of growth of manufacturing output, the faster the rate of growth of the wider non-manufacturing sectors of the economy. In effect, rapid growth in manufacturing and its improved productivity releases skilled labor from the sector, which then finds employment elsewhere in the economy, raising productivity levels as it does so.²⁷

As expounded by Thirlwall, the full Kaldorian model may be elaborated with further propositions.²⁸ The most important of these relate to exports and the balance of payments as a potential constraint on the growth of manufacturing, and hence of the economy as a whole. The growth of manufacturing output is constrained fundamentally

²⁵ Kaldor's generalizations can be supplemented by more recent research into manufacturing, among the most interesting of which would have to be Rodrik's very recent demonstration of strong convergence across countries' economies when manufacturing is the focus of analysis. As Rodrik puts it: 'what high-growth countries typically have in common is their ability to deploy policies that compensate for the market and government failures that block growth-enhancing structural transformation. Countries that manage to affect the requisite structural change grow rapidly, and those that fail don't' (Rodrik 2013, 202–203). Rodrik's carefully chosen words are code for the effectiveness of industrial policy in allowing latecomers to catch up with industrial leaders. The reported result is best interpreted as a further demonstration of the centrality of manufacturing in determining which countries do well and which do poorly.

²⁶ See Young (1928) for an early and influential account of this perspective.

²⁷ Kaldor himself tested these propositions on cross-national data, obtaining a reasonable fit. Subsequent work has more solidly grounded the propositions utilizing important cross-national and cross-regional data sets, for the case of South-East Asia (Felipe 1998) and, significantly, across regions of China (Hansen and Zhang 1996). The relationships were even more recently tested across 11 countries (including Korea, Taiwan and Japan), covering the years 1992–2007, that is, a decade and a half, and found to hold robustly (McCausland and Theodossiou 2012).

²⁸ Two of these relate to the onset of maturity of an economy. As the scope for transferring labor from sectors with diminishing returns to the manufacturing sector dries up, or as output comes to depend on all sectors of the economy, so the overall rate of productivity improvement will slow down. It is in this sense that Kaldor sees countries exhibiting slower rates of growth as they mature.

not by resources on the supply side, but by initial demand emanating from agriculture and eventually demand from the world market; and in that sense the capacity of exports to finance imports represents a constraint (the ‘balance-of-payments constraint’) that will be met much earlier than any constraint on the supply side (as emphasized in all Solovian models of growth and also the ‘new’ growth theories based on endogenous growth). A fast rate of growth of exports and output will tend to set up a cumulative process which will then propagate through the link between output growth and productivity growth, cementing the lead of the advanced countries and making it harder for follower countries to catch up, or, when employed by a fast follower such as Korea or now China, accounting for their rapid convergence.²⁹

In essence, Kaldor’s laws imply a strategy for industrial development based on building a modern manufacturing sector as fast as possible, in order to absorb underutilized labor in agriculture and extractive industries and to build a modern economic sector based on tradable goods. This is a generalization based on sound historical experience: no country has successfully industrialized without focusing primarily on manufacturing. Indeed the experience of all successful catch-up countries or regions or city states over the past 400 years indicates that manufacturing is invariably the passageway to industrial expansion and catch-up. This is because manufacturing embodies the capacity of generating increasing returns (sustained productivity improvements), whereas other industrial sectors – notably agriculture and extractive industries – embody diminishing returns, in that the natural endowment of one factor must eventually limit productivity improvements.³⁰

Dani Rodrik, who is perhaps the leading proponent of a theoretically sound approach to development strategy today, is very clear on this point: ‘If you want to develop you have to promote growth’, and ‘If you want growth, you need to promote manufacturing’, and ‘If you want manufacturing you have to promote tradables together with the skills that their production calls for.’ As he puts it:

What is common in the experiences of Japan, South Korea, China and all other growth superstars is that they based their growth strategies on developing industrial capabilities, rather than on specializing according to their prevailing comparative advantages. They each became manufacturing superpowers in short order – and much more rapidly than one would have expected based on their resource endowments. (Rodrik 2010, 89–90)³¹

As Rodrik and others, such as ‘structural economists’, insist, the way that developing countries overcome the disadvantages and structural difficulties they encounter as they

²⁹ See Thirlwall (2002) for an exposition of these points. Recently, Pacheco-Lopez and Thirlwall (2013) have offered a reinterpretation of Kaldor’s first growth law for open developing economies, again based on the link between manufacturing, exports and overall growth. Such an approach provides a more robust defence of export-led growth strategies than the market-conforming accounts provided by the World Bank for the East Asian miracle.

³⁰ See Mathews and Reinert (2014) for a restatement of this argument and its extension to the case of renewable energy industries in the twenty-first century, all of which provide energy security based on manufacturing.

³¹ Rodrik goes on: ‘The lesson is this. High-growth countries are those that are able to undertake rapid structural transformation from low-productivity (“traditional”) to high-productivity (“modern”) activities. These modern activities are largely tradable products’ (Rodrik 2010, 90). He then concludes: ‘In other words, poor countries become rich by producing what rich countries produce’. For further elaboration see Rodrik (2013).

seek to build these modern (tradable-goods) sectors is through boosting the profits of firms that are prepared to enter the competitive arena – through subsidies, or tax breaks, or market mandates, or local supply requirements, or any of a raft of policies that are collectively known as industry policy. The countries that have successfully industrialized practised industrial policies of one kind or another; those that failed, did not.³² In other words, structure matters.³³

The main features of the economic fundamentals of late industrialization may be summarized in the following five propositions, consistent with the fundamental observations of Kaldor and Thirlwall and theoretically well-informed explorations of East Asian experiences, such as those by Storm and Naastepad (2005). In summary economic terms, successful late industrializers are found to:

- focus on manufacturing as the engine of development – providing social mechanisms for labor to move from rural and agricultural activities to manufacturing activities;
- specialize initially on labor-intensive light-industrial manufacturing, building export industries to cover costs of importing equipment, supplemented by controlled levels of FDI and securing insertion in global value chains;
- move up the value-adding curve to industries with higher levels of technological capabilities, capital intensity and greater scale, with the world market as the prime destination and utilizing latecomer advantages of lower labor costs for as long as they last;
- fashion a high savings level through the tax system and encouraging firms to finance investment through retained earnings, to drive a high investment level as the principal means of accomplishing high growth rates in manufacturing; and
- maintain macroeconomic stability via interest rates and foreign exchange controls, thereby exercising strong controls over foreign flows of financial capital.

These principles can be expected to work – provided that countries attend to the strategic and other aspects of late industrialization, and apply the principles to the conditions prevailing at the time.

STRATEGIC FACTORS IN LATECOMER INDUSTRIALIZATION

Discussion of development, whether in its mainstream variant or its ‘revisionist’ latecomer variant, is strangely devoid of any reference to the extensive literature on strategy; where strategy is being deployed at the level of the firm or region or country. Above all, what the East Asian countries promoted (and which was passed over in silence by

³² If the world is interested in the further diffusion of industrialization, as the only known means of raising incomes and ending poverty, then such industry policies need to be recognized and respected, and not outlawed as is the current approach by countries that are members of the WTO.

³³ As Rada and von Arnim (2012, 264) put it: ‘Higher labor productivity and economic growth do not necessarily reduce poverty. If output expansion is not accompanied by a transfer of labor to more productive and better paid jobs, problems of underdevelopment remain unresolved’.

Gerschenkron) was the capitalist firm. It is no surprise that success in East Asia was accompanied by sustained attention to the nurturing of competitive capitalist firms, leveraging the technologies on which they got their start, protecting them initially from ferocious foreign competition (by tariffs and a range of tax breaks), and exposing them to international competition as fast as possible.

Hamel and Prahalad (1993) created a sensation in the world of strategy with their notion that firms with ambitions to move to the lead in an industry, or to catch up with existing leaders and displace them, typically employ stretch goals rather than being content with 'fit', and put these stretch goals into effect through 'resource leverage'. This description certainly fits advanced firms like Cisco, with their capacity to externally leverage technologies via well-tuned processes of merger and acquisition. More to the point, it matches the requirements of latecomer firms looking to break into an industry: such firms start from behind, as latecomers, but have strong ambition to catch up and even overtake industry leaders. 'Accelerated technology leverage' is an important aspect of this process, as is evident in numerous case studies of East Asian catch-up.³⁴

Resource leverage as a general concept in strategy implies firms linking up with others and accessing or acquiring technologies that would otherwise be unavailable. I and others, such as Hobday (1995), have utilized this notion of the latecomer firm and its strategies of resource leverage (where the resources are technologies, markets, competences) to capture the strategic features of late industrialization. Technology leverage implies that the technologies are there to be accessed – which is the very essence of late industrialization. But how they are accessed depends on the state of play and the current forms of technology protection and diffusion. There are no standard means for accessing technologies and building technological capabilities; this is why successful late industrialization is always a matter of strategic choice, or what Kaldor (1967) termed the significance of 'strategic factors in economic development'. Latecomers to the industrial arena are best advised to pursue fast-follower strategies, as perfected by East Asian firms, and to focus on industries where dominant technologies may be found; these are the industries where competition turns on cost minimization and the building of mass production capacities as fast as possible. There are numerous cases demonstrating the success of such fast-follower strategies, from Japanese and then Korean entry into the DRAM sector in the 1980s to the entry of East Asian firms into the flat panel display industry in the 1990s, focusing on the dominant TFT-LCD technology (and timing their entry strategies to coincide with downturns) and the entry of Taiwanese and Chinese firms into the solar photovoltaic (PV) industry, again focusing on the dominant technology of crystalline silicon.³⁵

Is development strategy unduly constrained by WTO rules, which apply to developing countries as much as to the developed world? Insofar as the WTO rules out

³⁴ See, for example, the study of East Asian technology-leverage strategies employed by East Asian latecomers in the semiconductor industry by my Korean colleague Dong-Sung Cho and myself (Mathews and Cho 1999, 2000).

³⁵ For my own studies on these topics, now spanning two decades, see Mathews (1995, 1998, 2001, 2002, 2005a, 2005b) and Mathews et al. (2011) as well as Mathews and Cho (1999, 2000) on catch-up in the semiconductor sector. For a subsequent study of catch-up strategies in the East Asian semiconductor industry, including China, see Rasiah et al. (2012).

infant-industry protection and subsidies, and emphasizes protection of intellectual property rights – which measures remove a large part of the toolkit employed by East Asian industrializers in the twentieth century – they clearly act as a constraint. But Amsden (2003) herself and other trade and development scholars such as Ayala and Gallagher (2009) insist that the WTO rules leave a margin for flexible application, and in particular the Agreement on Subsidies and Countervailing Measures (SCM) – which allows countries to address technological, poverty and environmental issues in creative ways – provides a means through which developing countries can frame a large part of their development strategy agenda. After all, the advanced countries already do so; and in particular the United States adopts a highly flexible approach to utilizing the SCM mechanisms as well as those on government procurement to enhance its own advantages (Weiss and Thurbon 2006). With such an example, it is understandable that developing countries, and China in particular, adopt their own flexible approach to WTO rules.

My own work on this theme of development strategy has emphasized the sequential processes of linkage by the latecomer firm with advanced sources of knowledge (for example, via insertion in global value chains or securing original equipment manufacturing – OEM – contracts), leverage of technologies or knowhow from these linkages and their adoption and adaptation by the firm, and repetition of this sequence in a process of economic learning. Leading scholars such as Sanjaya Lall (1992), Bell and Pavitt (1996) or Keun Lee (2013) clearly recognize the necessity to build technological capabilities as a central aspect of industrialization.³⁶

In summary, the strategic aspects of late industrialization may be characterized in the following way. Successful late industrializing firms and agencies tend to:

- rely on technology-leverage strategy as the principal means of securing access to technologies developed already, utilizing institutional and economic means to adapt them to the conditions of the country and to drive export-oriented industries;
- focus on industries with a dominant technology where technology leapfrogging and mass production can capture economies of scale (via either promoting domestic firms to enter these industries or encouraging foreign firms through institutional innovations such as science parks), and industries with short cycle times (in terms of patenting rates) to maximize latecomer advantages;
- aim at closing the gap with advanced countries and their technologies in each sector as the market is entered, always with an emphasis on building requisite technological capabilities and fast-followership;
- seek to cover the value-chain as fast as possible, using import substitution and leverage to close gaps and move as fast as possible from OEM to ODM (design) and OBM (building brands); and
- move as rapidly as possible from imitation to innovation (Kim 1997), by building

³⁶ Lall (1992) and Bell and Pavitt (1995), amongst others, pioneered the emphasis on technology and capabilities enhancement as part of development strategies. Lee (2013) has pioneered the analysis of patent records to track the shift in technological catch-up strategies by East Asian countries over time, as their capabilities are enhanced; in particular he has characterized the strategy of focusing on industries and technologies with short cycle times (in terms of patenting) in order to maximize latecomer advantages

a national system of economic learning and innovation, boosting higher learning and research and development (R&D) expenditures and maintaining a national focus on technological capability enhancement as the highest priority.

DEVELOPMENTALISM AND DEVELOPMENTAL STATE

The clearest difference between nineteenth-century late industrialization efforts (particularly those of Germany and the USA) and twentieth-century East Asian efforts (Japan and then the NIEs) lies in the role of the state. So significant was state direction and coordination in the latter case that Johnson (1982) famously labelled Japan's developmental institutional apparatus as a 'developmental state'. While Gerschenkron himself had emphasized the role of the state in bringing 'backward' countries abreast of leaders, none of his nineteenth-century examples featured anything as comprehensive or successful as the twentieth-century developmental states created for purposes of industrial catch-up in East Asia – first in Japan; then in Korea, Taiwan and Singapore; and then to some extent in South-East Asian countries; and now of course prominently in China.

As latecomers, the East Asian countries developed catch-up institutions, exactly as described and forecast by Gerschenkron based on a reading of catch-up industrialization within Europe in the nineteenth century. These catch-up institutions were oriented towards the capture of technologies (for example, the Industrial Technology Research Institute, ITRI, in Taiwan), the promotion of inward FDI (for example, the Economic Development Board in Singapore) or the raising of skills levels (for example, the Penang Skills Development Centre in Malaysia). Taiwan's ITRI may be taken as exemplary of the role played by a public institution in capturing strategically relevant technologies (resource leverage) and driving their diffusion to the private sector through novel institutions such as R&D consortia.³⁷

The development institution par excellence is the national development bank, which has been utilized to varying degrees by all successful East Asian latecomers, as well as by countries such as Brazil (Brazilian Development Bank, BNDES) and now by China (China Development Bank, CDB). National development banks play a role in leveraging foreign capital and making it available to local firms, but also in promoting the development of domestic equity and bond markets, and in driving investment towards strategic industries. Corruption is held in check by overt enforcement of probity (as in Singapore) and through Amsden's reciprocal control measures which are targeted at defeating government failures.³⁸

There are chapters in this book by scholars better equipped than I to discuss the role played by the developmental state and its prospects in the twenty-first century.³⁹ With my Korean colleague Keun Lee, I have contributed something to this issue with the notion of

³⁷ See my study of Taiwan's R&D consortia in Mathews (2002).

³⁸ On the China Development Bank and its role in underwriting the development of a bond market in China and the internationalization of Chinese firms, see Sanderson and Forsythe (2013); likewise for a sympathetic treatment of the Brazilian neo-developmental model and the role played by the BNDES, see Hochstetler and Montero (2013).

³⁹ See, in particular, Chapter 33 by Thurbon and Weiss in this volume.

a ‘Beijing–Seoul–Tokyo Consensus’, or BeST Consensus, for development based on the approaches favored by Beijing, Seoul and Tokyo.⁴⁰

In summary, in organizational terms, successful late industrializers tend to:

- promote firms as carriers of industrialization, with advanced systems for their creation, governance and dissolution (bankruptcy laws);
- build institutions as the agents of development and industrialization, to cover facets such as technology leverage and acquisition (for example, ITRI in Taiwan); and financial leverage (for example, the EDB in Singapore);
- coordinate the roles and functioning of institutions and development agencies at the cabinet level (developmental state);
- ensure that agencies of development embody principles of reciprocal control mechanisms (Amsden 2001); and
- adapt the institutional mix as needed, creating new institutions and dismantling old ones as needed, measured against the backdrop or standard of international competitiveness.

NEXT CHALLENGE: THE GREENING OF DEVELOPMENT STRATEGY

The countries that have achieved wealth today industrialized through a common pattern, involving access to energy sources of unprecedented power (steam power, then electric power, based on fossil fuels), access to resources at unprecedented levels of exploitation (largely through exploitation of extra-territorial colonial possessions) and the targeting of finance to facilitate the construction of a vast industrial infrastructure (through new industrial banks, such as the Deutsche Bank).⁴¹ Latecomers, such as the East Asian countries of the past half-century (Japan, then Korea and Taiwan and Singapore), faced a situation where they could deploy the same industrial model but also exploit latecomer advantages, developing novel strategies for the building of their own industrial corporations and accessing export markets through cost-driven mass production capacities. Now in the twenty-first century we find industrial giants such as China, India and Brazil likewise looking to industrialize and bring their vast populations up to something comparable to First World standards, and looking to that same conventional industrial model as the means to do so.

The problem – or inconvenient truth – is that the conventional industrial model will not ‘scale’ to satisfy the aspirations of these twenty-first-century industrial giants, let alone the aspirations of the many countries in Africa, South and Central America as well as South and Central Asia that are looking to upgrade their wealth and income through industrialization.⁴² The Earth’s resources are already overstretched by the actions of the

⁴⁰ See Lee and Mathews (2010); the BeST Consensus is framed as an alternative to the discredited Washington Consensus.

⁴¹ This and the next three paragraphs are based on Mathews (2013b).

⁴² See von Arnim and Rada (2011) for an investigation of this issue in relation to energy use by developing countries, where Egypt is taken as a representative case. The authors demonstrate that labor productivity

first industrializers, which have led to around 1 billion people enjoying a prosperous lifestyle. To bring up to 6 billion people to a middle-class lifestyle by mid-century (as foreseen by economists such as Michael Spence) would call for a sixfold expansion of these activities, with intensity multiplied by the accelerated pace of change. China and India are both courting disaster: from rising oil prices, increasing vulnerability to a handful of oil suppliers, and exacerbating tensions with existing industrialized countries and their 'carbon lock-in'.⁴³

The answer to this conundrum is not for China and India to turn their backs on growth and industrial development, but to build a new kind of industrial system and a new kind of development pathway. This alternative is what is known as the 'green' industrial system (green growth, green development), and the current interest of the UN and all development-oriented agencies is to ascertain to what extent a green industrial system really is being fashioned and implemented in these countries, and to what extent it may represent a fresh option for the many developing countries coming after them.⁴⁴ Such a green development strategy is the inevitable choice for China, Brazil and India, because these countries can leapfrog into the lead with green technology, and because they have such huge populations for which the traditional model would not scale.⁴⁵

There has been a stream of recent reports extolling green growth as a development strategy as well as a favorable turn by newly industrialized countries such as Korea. But the case is generally made in terms of the world's collective interest in green outcomes. I am concerned instead with the benefits that accrue to the individual countries that pursue a green development (GD) strategy.⁴⁶ While the term 'green development' or 'green growth' is subject to various interpretations, the key ideas are that an industrial system based on something other than fossil fuels and extensive resource throughput is being constructed; with small initial steps, but always aimed at minimizing the fossil-fueled footprint. The goal of such an approach is to build energy systems that can increasingly live off their renewable energy income as well as materials processing industries that tend to minimize virgin resource inputs, via moves towards a Circular Economy. Both aspects have profound implications for countries' development prospects.

Manufacturing remains the focus and central concern; in this case, the emergence of a manufacturing sector producing solar panels, wind turbines, new smart grid devices,

increases can be associated with increases in energy intensity (largely through use of fossil fuels) or through improvements in energy productivity (where renewable energies might play a role).

⁴³ On the geopolitical tensions generated by competition for resources, see Klare (2012).

⁴⁴ The UN's *World Economic and Social Survey* report for 2009 (*Promoting Development, Saving the Planet*) argues that while greening of growth in developing countries is feasible, nevertheless such a 'combination of large-scale investments and active policy interventions requires strong and sustained political commitment embodied by a developmental State' (UN 2009, vii–viii).

⁴⁵ See Spence (2011). Chinese scholars such as Hu Angang (2006a, 2006b, 2011, 2014) see green development as the 'inevitable choice' for China; and by extension, for the rest of the developing world.

⁴⁶ See Mathews (2007a, 2007b, 2008) for early statements of this view. Likewise the 'ecological modernization' perspective has argued that ecological reforms such as a shift to renewable energies can carry economic and industrial benefits; see Mol (2006) for an examination in the case of China, and more recently Green and Stern (2016), who see China's early reliance on fossil fuels giving way to a broader energy mix involving non-fossil sources including renewables and nuclear.

energy-efficiency technologies, electric vehicles, recharging stations and all the other elements of the emergent, green sector. Manufacturing, with its increasing returns, was and is the central issue on the industrial development agenda. It is notable that China plans for a level of growth in its clean-tech sector of 15 percent per year over the next decade, as opposed to half that level of growth overall.⁴⁷

If there is anything original in this synthesis, it must be my insistence that green growth strategies can be viewed as developmental, as a response to new business opportunities for leapfrogging to new technologies while the advanced world remains ‘carbon locked-in’.⁴⁸ The green sector can be expected to propagate through the fossil-fueled economy in the same way that development economists view the modern (manufacturing) sector as propagating through the traditional economy: via interfirm linkages, both forward and backward, and the generation of increasing returns. Fast-follower strategies perfected in East Asia are now being applied to drive the diffusion of green innovations. In this way, the greening of industrial development, which I see as the inevitable way forward for developing countries, can take its place in the 400-year history of developmentalism, extending back to the Italian Renaissance.

A new ‘green development’ model therefore has to be created, and is being created and taking shape, notably in China but in other ways in Korea, Japan and to some extent in India. The features of the green development model, insofar as it is relevant to late industrialization, may be summarized in the following way. Late industrializers that are greening their development, in ways that complement the ‘black’ development based on fossil fuels, tend to:

- focus on renewable energies and resource efficiency, in addition to traditional fossil fuel and resource-wasteful pathways, to ensure their energy and resource security;
- finance these developments with eco-targeted financial instruments, such as climate bonds and green bank lending at preferential rates, drawing on the vast funds held under management by institutional investors;
- utilize fast-follower latecomer strategies which are proving to be extremely important in making the transition, as countries such as China gain access to the store of advanced technologies and utilize them, without the inertia induced by carbon lock-in, to place their economies on a new clean-tech footing;
- focus on manufactured systems (such as renewable energies) which embody learning-curve cost reductions and increasing returns, as opposed to the diminishing returns found in extractive and agricultural industries; and
- make extensive use of smart government intervention, both to break the power of carbon lock-in of existing fossil fuel interests and to establish clear rules that can be credibly enforced to govern the new investment trajectories.⁴⁹

⁴⁷ See Mathews and Tan (2014; 2015) for further elaboration on this point, and Mathews and Tan (2011; 2016) on China’s moves towards a Circular Economy.

⁴⁸ See my argument in Mathews (2013a) that renewable energies constitute the vanguard of a new techno-economic paradigm, where late-developing countries might secure an advantage through leapfrogging.

⁴⁹ See my exposition of these green development strategies in Mathews (2013b), as well as the book-length exposition, Mathews (2014).

CONCLUDING REMARKS: INDUSTRIALIZING THE WORLD

The central proposition of this chapter is that the latecomer pattern of industrialization is not some historical curiosity. On the contrary, it is alive and well and underpins the enormous success of China in lifting hundreds of millions of people out of poverty. And it is likely to underpin the efforts of India, Brazil and then most of the other countries looking to enjoy the benefits of industrialization – in Africa, Latin America as well as South and South-East Asia. So the pattern of latecomer industrialization – when applied in its green variant – must be seen as a powerful tool that promises to drive the next great transformation of the global economy.

In this chapter I have taken the Gerschenkron–Amsden account of late industrialization as canonical and argued that it both provides an explanation for the successful cases of non-Western industrialization (the experiences of East Asia and notably China today) and promises to provide strategic, organizational and economic guidance for the other cases of countries that are clamoring to join the club of industrialized nations. Industrial development (the restructuring of the economy towards modern or ‘tradable-goods’ sectors) is the only known method of raising incomes and relieving poverty – as opposed to trade- and market-focused strategies that ignore the fundamental role played by technological learning and enhancement of technological capabilities. To the canonical ingredients I have added: (1) a means of embedding the late industrialization strategy in circular and cumulative theories of economic growth, with their emphasis on the centrality of manufacturing; (2) a serious turn to strategy by late industrializers (for example, engagement with fast-follower firm-level strategies and technology leverage); (3) an organizational account based on developmental state agencies and an ideology of developmentalism; and (4) the all-important issue of greening of industrial strategies so that the results of their implementation might stay within the ecological boundaries of planet Earth.

It is long overdue that development economics and strategy moved from the margins of the social sciences to become their core disciplines. As argued persuasively by Storm (2011), the developing economies constitute the ‘general case’ for economics, while the advanced world constitutes a special case of diminishing relevance. Development cannot be comprehended, much less implemented effectively, by using the tools of mainstream analysis. The vast body of insights contained within the ‘alternative paradigm’ of development remains an indispensable source for the further diffusion of industrial patterns of development, particularly in its latest phase, where it has a tinge of green.

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33. The developmental state in the late twentieth century

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In this chapter we turn our attention to the developmental state and how – as concept and empirical case – it has advanced theoretical and policy concerns about economic development. We begin by examining the historical context in which the developmental-state concept emerged and how it deviated from the dominant economic theory of the day. We then examine the constitutive features of the developmental state before addressing some of the controversies, as well as myths and misunderstandings to which its analysis has given rise. We conclude with a discussion of the implications of developmental-state theorizing for policy-makers in developing countries.

THE ORIGINATING CONTEXT: FROM ‘STATE AS PROBLEM’ TO ‘STATE AS SOLUTION’

The term ‘developmental state’ (DS) originated in an effort to make sense of Japan’s meteoric rise as an economic power in the late 1970s (Johnson 1982). The United States’ (US) fear of industrial decline and the threat to its technological supremacy fuelled debate over how to explain and respond to the Japanese challenge. The Cold War rivalry between the two superpowers imparted shape and intensity to this debate. In the American (that is, United States) setting, the state’s involvement in the economy was cast in an emphatically negative light, while economic advancement was invariably attributed to the workings of free markets. This state-versus-market mindset was further entrenched by neoclassical economic theory, with its faith in free markets as the only path to economic prosperity. Thus a form of ‘state blindness’ emerged in the US, negating the idea that the state might play a positive, even indispensable, role in a capitalist political economy. In this ideologically charged environment, East Asia’s¹ rapid rise became widely attributed by US economists to the embrace of free-market capitalism.²

In light of this orthodoxy, the publication of Chalmers Johnson’s *MITI and the Japanese Miracle* (1982) set a Japanese cat among the American pigeons. In first articulating the DS concept, Johnson set out to show that, geopolitical rivalry aside, there was more to the world than implied by the categories of free-market capitalism and state-directed communism. Capitalism was not monolithic. The Japanese experience showed

¹ The classical developmental states of East Asia are Japan, Taiwan and South Korea, the so-called ‘Asian Three’, all located in the northern part of the region. In South-East Asia, apart from the city state of Singapore in the south, the developmental state tradition did not take hold. Unless otherwise indicated, our analysis focuses on the North-East Asian experience.

² For neoclassical interpretations of East Asia’s success see Belassa (1980), Hughes (1980), Islam (1992) and Riedel (1988).

that the state had played a major role in the country's spectacular recovery and industrial transformation. In Johnson's view, it was Japan's unique model of capitalism that accounted for its rapid rise, and which thus constituted the real challenge for the United States. Unless they dispensed with the 'state as problem' view that economic orthodoxy had entrenched, US policy-makers would never truly understand the source of Japan's industrial dynamism or stand a chance to effectively respond to it. Johnson's message sparked serious debate as to whether the US should take a leaf out of the Japanese book and adopt its own 'strategic industrial policies' to defend its high-tech leadership.³

By being grounded in an actually existing political economy, the contribution of the developmental-state concept thus lay in challenging the prevailing state-versus-market paradigm in an empirically informed way. Discovery and analysis of the developmental-state experience in Japan soon broadened to include Korea and Taiwan (Johnson 1987). All three North-East Asian cases showed how the state in a capitalist economy could be part of the solution to economic development. In each instance, Johnson argued that transformative success was tightly connected to the existence of a certain kind of state: one that could be distinguished by its leadership's ambition and commitment, its institutional structure and its policy approach. A developmental state could thus be defined partly by the mindset of its central political actors – driven to catch up and keep up with the industrialized West; partly by what it looks like – an economic bureaucracy with Weberian characteristics (competent, cohesive, mission-oriented, independent from special-interest pressures); and partly by what it does – technology upgrading and strategic industry policy.

In the decade that followed *MITT's* publication, a number of historically sensitive, empirically rich studies of East Asia's rise appeared, each drawing in different ways on Johnson's pioneering work.⁴ This growing corpus of developmental-state-inspired literature provided an important antidote to the deductive theorizing inherent in mainstream economics, in which historical facts were routinely ignored or distorted in an effort to validate abstract models. While Johnson's pioneering study did not shy away from abstraction – positing an ostensibly generalizable model from the Japanese development experience – it was offered as an ideal type, not a one-size-fits-all solution to the development question. In short, the developmental-state model was intended as an approximation of the Japanese reality; it accentuated certain features of this actually existing state, the presence or absence of which might then be systematically identified in different contexts. Used in this way – as a standard of comparison, not a 'cookie cutter' – the developmental-state model has since proved to be a useful analytical tool for those interested in the questions of why, when and how states might play a positive role in the economic development process.

In the section that follows, we discuss in greater detail what the developmental states of North-East Asia actually did during the second half of the twentieth century,

³ Some of the most vocal proponents of this idea were analysts at the Business Roundtable on the International Economy (BRIE) at the University of California, Berkeley. BRIE released a host of working papers on this topic in the early 1980s by (amongst others) Laura D'Andrea Tyson, John Zysman, Michael Borrus and Steven Cohen. See <http://brie.berkeley.edu/>.

⁴ The classics include Amsden (1989) and Woo (1991) on Korea, and Wade (2003 [1990]) on Taiwan. See Onis (1991) for an excellent overview of the early developmental-state literature.

highlighting from their shared experience certain distinguishing features consistent with the idea of a developmental-state model.

THE EAST ASIAN INDUSTRIALIZATION EXPERIENCE AND THE DEVELOPMENTAL STATE

It is helpful to think of the developmental-state model as an answer to a pressing empirical question: how did the East Asian countries of Japan, Korea and Taiwan rise so far and so fast without following free-market prescriptions? Between the 1950s and the 1980s, these countries achieved the highest sustained growth rates ever recorded as they speedily transformed their industrial structures, drove down unemployment, virtually eliminated poverty and steadily improved living standards. How can we explain such phenomenal results? In the normal scheme of things, climbing the ladder of industrial development has meant steadily acquiring prowess in traditional labour-intensive sectors such as food, textiles, steel and the like; but East Asian firms did this and more. By going further and faster they created a swathe of high-technology industries which now include super-computers, robotics, semiconductors and flat panel displays. By any stretch, this was an exceptional achievement in the history of industrialization. The developmental-state model represented a three-part answer to this question: one that focused on what policy-makers in developmental states actually do, the mindset that guides their actions, and the institutional architecture that assists the process.

What Developmental States Did: Strategic Industry Policy

In East Asia's developmental states, from the 1940s in Japan, the 1950s in Taiwan and the 1960s in Korea, state actors took (and in significant areas continue to take) a prominent and proactive role in coordinating structural change and the upgrading of technology. Using a mix of different policy tools, they each pursued a strategic industrial policy; strategic in the sense of proactively selecting particular industry sectors for development. As history has shown, growth is not inevitable; it requires a strategy. As Robert Wade put it, policy-makers imparted 'directional thrust' to the economy 'in line with an exercise of foresight about the economy's future growth' (Wade 2003[1990], xliii).

The focus was not just on exports. These states combined export orientation with import substitution. Government officials did not 'pick winners' as if in a lottery. They typically studied the import profile to see what products or components of a product could be made locally for both domestic consumption and/or selling internationally. This process is one of continuing discovery: how many and which firms have the potential to produce X or Y? Where are the promising markets? What mix of incentives and other public inputs do they need to get to that point? While in the early phase of industrialization bureaucrats turned their strategic efforts to the technologically simpler items, such as keyboards for computers in the case of Taiwan, later they promoted the higher-value-added components such as flat panel displays and LEDs, in addition to a host of high-end final products (for example, wireless telecommunications, photonics and netbooks). Being willing and able to seek access to this kind of knowledge on a regular basis, and

being willing and able to act upon it, are the stuff of transformative capacity, a point we return to below.

In view of the prevailing theoretical assumptions about government failure (and indeed the fact that industrial policies in various parts of the world are often associated with failure or lacklustre results), much subsequent debate has centred on why, in these settings, such policies seemed to succeed more often than they failed. Since other countries in the region – South-East Asian countries – were not doing nearly as well, and since many developing countries in Latin America with superior resources and starting points were lagging well behind, the North-East Asian experience raised a critical question that has by now produced a distinguished body of comparative research: why does state involvement get such mixed results, producing relatively robust effects in some settings but poor or perverse outcomes in others?

The role of incentive structures certainly forms an important part of the explanation. Common to all North-East Asian developmental states was an incentive structure in which state support was conditioned by performance requirements. Rather than being simply offered as handouts, subsidies were made conditional on exports, and protection was always time-limited (see Amsden 1989). Conditionality thus had the positive feature of ensuring that the incentives were captured by firms which were able to compete in international markets, rather than going in scattergun fashion to the strugglers and stragglers. Another common practice in all three settings was ‘administrative guidance’, an informal, ‘below the radar’ activity in which smart industry bureaucrats (frequently trained in engineering) would find ways to ‘nudge’ international companies to work with potential local suppliers, rather than sourcing a particular component abroad. Nudging might sometimes consist of deliberately delaying licensing approval to import a particular component that might be made locally. In this way, a multinational would eventually get the message and source locally, thus catalysing new industry initiatives (on the Taiwan experience, see Wade 2003 [1990]).

There is little doubt that East Asian governments used many such important mechanisms in a creative manner to pursue their developmental project. But this begs the question: what made such policies and their implementation possible in the first place? We now know that answers to these questions cannot be arrived at by simply studying a particular set of policies or policy tools, since the policy mix in developmental states has varied over time and place. At the height of their post-war industrial transformation, Japan, Taiwan and Korea differed along several important dimensions including, *inter alia*, their political systems (one being a democracy, the others military autocracies); their reliance on state-owned enterprise (heavy in Taiwan, light in Japan); their dependence on international capital markets (strong in Korea, weak in Japan); and their industrial strategies (technology independence in Korea and Japan; technology leverage in Taiwan). The list is indicative rather than exhaustive of their differences. China and Singapore add further variations on the theme, namely strong reliance on foreign direct investment (compared with relatively tight controls in the East Asian Three).

The question of effectiveness draws analytic attention to state capacity, a concept that turns on institutions, rather than policies or economic structure. Effectiveness in formulating, coordinating, implementing and monitoring policies requires certain institutional software and hardware. Thus, questions about state capacity can only be answered by looking in each case at the state’s institutional architecture. This refers to a

combination of three things: the mindset of the state's central political actors, including their fundamental priorities and goal orientation (institutional software); the state's internal organization or make-up; and its external linkages with economic and social actors (institutional hardware).

Institutional Software: The Mindset of Central Political Actors

The institutional 'software' of developmental states refers to the political will to pursue a developmental project and to the wider political environment that supports and sustains it (e.g. Johnson 1982, 305–307; Pekkanen 2003, 212–213; Weiss and Thurbon 2004, 61–72; Thurbon 2016). Its importance cannot be overstated and its construction is possibly the most problematic in the absence of a motivating pressure (in most cases, externally induced). In all three NEA cases, a group of state actors emerged who were demonstrably committed to economic and social transformation and highly motivated to pursue that goal (industrial catch-up). More to the point, they based their legitimacy on the ability to grow the economy and increase employment, income and living standards (Johnson 1999, 52). Was there a common denominator? Indeed there was. In all three cases, the main driver of that commitment has been an external impetus, a pressure originating from the international system, which we can call the 'security imperative'. Living on the fault-lines of the Cold War in the presence of a credible and stable security threat on their doorstep exerted an unusual pressure to pursue security through economic strength.⁵ In the cases of Taiwan, Korea and Singapore it was the geopolitical imperative of sustained external threat that galvanized state actors to embrace and drive forward a hegemonic project. In the case of Japan, defeat in World War II was especially transformative in delegitimizing militarism and constructing security in economic terms (Katzenstein and Okawara 1993). And now for China, the imperative to catch up with the West and restore its place in the world polity is a major driver of its developmental project.

The significance of the security imperative in the East Asian experience is that it honed commitment to a highly focused national development project: it acted as a galvanizing force that concentrated the mind of political leaders and state actors and helped to forge a consensus around what needed to be done. Much as World War II demonstrated this effect on national governments in the West, so the experience of living on the fault-line of the Cold War had a similar impact on East Asian governments. The sense of national emergency impelled governments to dedicate themselves to the task of industrial transformation for national-security purposes.

Another important factor in honing commitment to a shared project was value coherence: the developmentally oriented cadre in each case shared a similar background and socialization experience. For instance, Japan's Ministry of International Trade and Industry (MITI) bureaucrats were drawn from the Munitions Ministry, Korea's presidential and planning body from the military, and Taiwan's from the Kuomintang (the Nationalist Party that ruled Taiwan for more than 50 years after fleeing mainland China in 1949). Shared experience and shared values (and not least military discipline)

⁵ See Woo-Cummings (1998) and Zhu (2002) on the relationship between external threats and developmental motivation in East Asia.

translated into a cohesive unit that united around a developmental project and set about systematically putting it into place. More generally in North-East Asia, a developmental commitment came to attain the status of national norm that leaders competing for office would have to take into account.

Two of the developmental states of North-East Asia (Korea and Japan) were also assisted in their project by nationally cohesive cultures, while all three benefited from an expanding international market, and – given the Cold War context – the explicit backing of the US for their rapid capitalist transformation.⁶ But while these conditions facilitated the developmental project, they did not make it desirable, likely, inevitable or successful. Without the institutional requisites, these supportive environmental factors would very likely have been dissipated.

As the twentieth century drew to a close, the durability of these states' developmental ambitions was tested by several political and economic upheavals instigated by democratization, financial crisis, technological maturation and global integration. Many commentators were quick to pronounce the dismantling of developmental states in light of these challenges (e.g. Pang 2000; Pirie 2008; Jayasuriya 2005; Wong 2011). This historical debate, however, is not quite over. Doubts remain, for example, as to whether Japan has really shed its developmental-state mantle even at this mature stage of economic growth (Vogel 2006; Pekkanen and Tsai 2005), or whether China's self-professed emulation of the developmental-state model is being borne out in policy and practice (Pekkanen and Tsai 2005, 14). Whether democratization has eliminated the state's basic developmental orientation in Korea and Taiwan, or rather disrupted the political consensus that had long supported it, is similarly unclear. For as political consensus has waxed and waned in these countries, so it appears that the forms and instruments of state activism have been reinvented (on financial and investment developmentalism in Korea and Taiwan, see Thurbon and Weiss 2006 and Thurbon 2016; on Korean developmentalism in the mobile communications sector, see Joh 2007 and Kim 2011).

Despite ongoing questions surrounding the long-term viability of developmental states, the fact remains that these countries did indeed experience rapid growth under conditions of extensive state involvement in the economy. So how was the political will to pursue a developmental project translated into effective action in East Asia? Here the importance of institutional 'hardware' comes into play.

Institutional Hardware: Professional Insulation and Economic Connectedness

On the 'hardware' side, two aspects of institutional structure have been found to contribute to the effectiveness of policymaking in East Asia's developmental states: professional insulation and economic connectedness. In all of the cases in question, professional insulation involved the creation of a pilot agency responsible for long-term strategy and coordination of policy inputs and staffed by a competent, mission-oriented professional bureaucracy, sufficiently insulated from the push and pull of special short-term interests. East Asia's pilot agencies – Japan's MITI, Taiwan's Council for Economic Planning and

⁶ See Cumings (1984) on the ways in which US hegemony post-1945 helped to shape the industrialization trajectories of Korea and Taiwan in the second half of the twentieth century.

Development (CEPD) and Korea's Economic Planning Board (EPB) – famously undertook this coordination role during the post-war transformation of their economies. How did they insulate (against corruption, political favours and special interests)? The primary mode of recruitment and promotion mattered. The agencies were each staffed with career bureaucrats, recruited and promoted on merit rather than on the basis of their political or personal connections. Expertise and competence were highly prized and rewarded; prestige factors were attached to the office. An independent perspective (*aka* 'insulation') was thereby cultivated.⁷

In the case of economic connectedness, while relatively insulated from political pressures, developmental states were at the same time highly connected to the surrounding economy. Through their industry and technology bureaux, pilot agencies developed strategy from the ground up, rather than imposing made-to-measure orders from the top down (a point we return to below). Close contact with the private sector was established via industry and trade associations, deliberation councils, outreach programmes and a myriad of informal networks. Regular government–industry lines of communication have enabled policy-makers to remain abreast of the changing needs of firms not only as economies opened up to international markets, but also as the tasks of technological innovation have become more complex. The North-East Asian experience has shown that if it is to be at all effective, a developmental state needs not just an independent sense of purpose (insulation); it also needs to interact in a routine manner with the economic actors it seeks to influence (connection). Developmental states have thus typically combined relative independence – insulation – from economic actors with well-developed connectedness to the private sector through a myriad of consultative mechanisms (Evans 1995).

Another way of expressing this point is to say that the state's developmental role has been most effective in an environment of 'governed interdependence' (Weiss 1995). By this term is meant a formal (and informal) institutional environment of consultation and cooperative information-sharing between an independent and cohesive developmental leadership on one hand, and well-organized business sectors on the other. In this environment, the state specifies the rules of the game – is responsible for the social goal-setting – and works with non-state actors to achieve them. Such a governance structure appears to work much better to transform and generate new industry than one in which the state imposes policies unilaterally (in a top-down manner); or, indeed, one in which individual firms or special interests call the shots. If a relationship of governed interdependence has enabled more effective policy formulation than top-down decision-making, it is because it entails a governance structure through which development officials are able to institute a continuing dialogue with economic actors; this, in turn, has enabled them to discover the opportunities for innovation and growth markets and to identify the obstacles to be overcome and the performance-based incentives required to do so.⁸

Accordingly, the idea of the developmental state does not entail timeless institutions for governing the economy. In the updated ('open economy industrial policy') version, the developmental state actively engages a wide range of public and private actors in

⁷ On these Weberian aspects of East Asian bureaucracy, see Evans (1995) and, especially, Evans and Rauch (1999) in which they measure their 'Weberianness'.

⁸ For a similar view of what makes for an effective industrial policy, see Rodrik (2008).

technology-focused networks, both domestic and international, which are tasked with the formulation and implementation of policies. In Korea, for example, since the turn of the twenty-first century, techno-nationalist ambitions have flourished in agencies most closely connected to the nation's industrial strength in information and communication technology (ICT), in particular the Ministry of Information and Communications (MIC). No longer coordinating economic outcomes from the top via one centralized pilot agency, industry-dedicated economic bureaucracies like MIC (now reconstituted within the Ministry of Trade, Industry and Energy, MOTIE) now coordinate a network of policy-makers, local and international firms (see, e.g., Kim 2011). In such cases, the state's effectiveness in coordinating more complex industrial upgrading in the context of increasing openness has come to rely more heavily on a governance structure involving intense policy dialogue and partnering with the private sector, and on the coordination of inter-firm networks for product development. Moving outside the Asian setting, a parallel argument has been applied to the state's high-technology role in Ireland. Indeed some have seen Ireland as a new ('networked') type of developmental state (see O'Riain 2004). But the 'network' label – intended as a contrastive concept to distinguish it from the (now outdated) idea of a 'centralized bureaucratic' developmental state – is a much closer approximation of how the North-East Asian developmental states have operated for a considerable time.

In sum, the North-East Asian development experience – and the developmental-state model drawn from it – shines an important light on the conditions under which states might play a positive role in the development process. The developmental-state model in particular specifies the institutional equipment that imparted these states with the capacity to produce effective policy outcomes with more consistency than most other developing countries. Thus, when looking to the much more mixed development records of, say, Brazil and India or the countries of South-East Asia and Latin America more generally, the difference lies not in the presence or absence of industry policies per se, but in the character and purposiveness of their bureaucracies, in the extent of their political cohesion and insulation and in the manner of their public–private linkages.

CONTROVERSIES AND MISUNDERSTANDINGS

The debate on the developmental state is now almost 30 years in the making. Recent strands of that debate have generated several controversies, some of which reveal a weak connection with the original research and a poor understanding of actually existing developmental states. Among the misunderstandings, the most prominent ones turn on the idea that the developmental state is necessarily authoritarian; that it entails top-down centralized policy-making; that it is distinguished by the extent of its intervention in the economy; that it necessarily trades off welfare and equality for growth. Some clarifications are therefore in order before we turn to the implications of developmental-state analysis for developing countries today.

Developmental States as Authoritarian?

A popular view has long characterized East Asian developmental states as 'bureaucratic authoritarian'. According to this view, without the ability to control economic and social actors the developmental state cannot exist – or indeed survive. In reality, the story is more complex. One can agree that – with the partial important exception of Japan – Northeast Asia's developmental states exhibited many 'hard' authoritarian characteristics in their early stages of industrialization. One can also agree that control over political opposition aided political elites in driving through a developmental project, not least by suppressing domestic consumption in order to increase capital for investment in industrialization. However, as earlier discussion has indicated, the claim that democratization and developmental states cannot co-exist is not well established. Taiwan and Korea began their transition to democracy more than 20 years ago, and Japan's democracy is more than 50 years old. Democratization mostly affects the supportive political environment of classical developmental states, not their institutional architecture, for it exposes them to shifts in the political consensus so important for policy continuity. The recent watering-down of Korea's ambitious Green Growth strategy in light of flagging public support and Presidential leadership change is indicative of the challenges facing democratic developmental states. (On the relationship between developmentalism and democracy, see Johnson 1987, 1989; Robinson and White 1998.)

Developmental States Entail Top-Down Policy-Making?

In some first-wave analyses, the developmental state was linked to top-down bureaucratic control – the ability of the state to *impose* its policies on the private sector. But this was always a caricature (and careful reading of Johnson would show that it was never the core of Japan's developmental-state effectiveness, even in its earliest phase). As mentioned, research has shown that in moving up the technology ladder, the Northeast Asian developmental state's ability to impose its decisions had relevance only in the early phase of industrialization and in very limited circumstances, but had little to do with maintaining transformative capacity over time (Weiss 1998).

Developmental States Distinguished by the Extent of Intervention?

Developmental capacity is not the same thing as state intervention in the economy. All states 'intervene' in their economies, but their developmental effects may be quite limited. It is not the amount or quantity of intervention that matters – but its *quality* and modalities. What counts is the state's ability to coordinate industrial change with the private sector in order to meet changing circumstances that are often context-specific.

In this context it is useful to recall that the developmental state is a contrastive concept. We have noted above that Johnson's study of the rise of Japan was the first to demonstrate that in spite of Cold War rhetoric, the political economy of capitalism was not reducible to the so-called Free-Market model. In the Japanese case, he observed a market economy, but one that was governed by a 'goal-directed' state. This state had a core ministry that prioritized concrete outcomes rather than procedural rules. Japanese policymakers – like the Taiwanese and the Koreans – targeted certain sectors for promotion because they

were convinced that what a country produced would make a difference to its future prosperity. Johnson contrasted the developmental state with the ‘regulatory state’, whose leaders were culturally or philosophically inclined to let the market determine outcomes, a philosophy he saw exemplified by the American approach (Johnson 1982, 18–19). Taken to its extreme, the Free Market view asserts that there is no economic difference between silicon chips and potato chips. By contrast, the developmental-state view holds that there are major consequences – for upgrading skills, technology, productivity, income and national prosperity. In this respect, developmental-state leaders were guided by the German economist Friedrich List, rather than by the neoclassical economists.

Developmental States Trade Growth for Equity?

The East Asian experience has demonstrated that social equity and economic growth are not, as some have suggested, opposed. To the contrary, unless prosperity is widely shared, economic growth is hard to sustain. Development for the East Asian leadership was perceived as critical to their legitimacy. High growth, through structural transformation of the economy, initially via the development of labour-intensive industries, delivered full employment. Job-creating growth reduced inequality by increasing income and by generating the tax revenues needed eventually to fund transfers. The East Asian pattern of relatively low inequality of income distribution – so-called ‘developmental citizenship’ (Chang 2012) – was also assisted by land reforms in Korea and Taiwan. One can see the significance of shared growth even in a highly developed country like the United States where dramatic and rising inequality over the past 30 years has massively concentrated wealth and income at the top. Since the rich consume little relative to their income, aggregate demand has been sustained by the rest. But the rest – the middle and lower classes – could only finance their consumption by going deeply into debt (borrowing against the value of their houses, for example), since their incomes have been stagnating or declining.

A Developmental State as a Unitary Totality?

As complexes of historically evolved political institutions, states are messy configurations – and developmental states are no exception to this rule. States are messy because their various components have crystallized at different points in time, experienced often separate histories and become linked to different constituencies, pursuing separate, constantly evolving tasks. As power structures, we might therefore say that states are *polymorphous* (Mann 1993) rather than unitary. They are not like an orange where all the segments fit neatly together. So the state may well be free-market in one sphere (like finance), yet developmental in another (for example, industry and technology), a promoter of free trade in some sectors (financial services), yet mercantilist in others (agriculture or textiles). Acknowledging the non-unitary nature of developmental states (and indeed all states) is important because it highlights the dangers inherent in interpreting changes in one sector (such as finance) as evidence of state transformation more generally: Thus, for example, recently formed central bank independence in South Korea has led some to posit a shift from ‘developmental’ to ‘regulatory’ state in East Asia (Jayasuriya 2005). Yet attention to developments in other areas – certain industry sectors for instance – suggests a rather different conclusion (Thurbon 2016).

IMPLICATIONS FOR DEVELOPING COUNTRIES

The East Asian industrialization experience has stimulated vigorous debate and policy interest precisely because it provides an uncommon example of successful late industrialization. The developmental-state model was in turn offered up as an explanation for that success. Not surprisingly, it soon captured the imagination of many political leaders still grappling with the challenges of late development. In some countries, such as South Africa, the political leadership went so far as to announce their intention to ‘build’ a developmental state of their own (though with little success). So how generalizable is the developmental-state model? Specifically, what lessons might be drawn from the East Asian experience? From the discussion so far, we can identify three actions undertaken by policy-makers that served to forge East Asia’s developmental states. These arguably constitute the most significant ‘generalizable lessons’ to be drawn from their industrialization experience.⁹

East Asian Policy-Makers Committed

Commitment has been the core ingredient of transformative capacity in East Asia’s developmental states. The language of commitment says: ‘Where there’s a will, there’s a way’ (a slogan that appeared in the entrance to the elevator in Taiwan’s Industrial Development Bureau; see Weiss and Thurbon 2004). In East Asia, developmental commitment meant that, as a general rule, policy-makers:

1. Prioritized the pursuit of a transformative project over the long haul (embodied, for example, in the common process of five-year economic planning).
2. Specified concrete goals (for example, to increase exports by a certain percentage over a certain period of time) and closely monitored progress towards these goals.
3. Were not diverted by the push and pull of short-term interests; leaders tended to stay the course while being prepared, when needed, to adapt to changing circumstances. For example, research has shown that from the 1950s to the 2000s, the identification of ‘strategic industries’ in Japan was determined primarily by policymakers’ perceptions of the importance of these industries to the national techno-industrial base. ‘Political’ factors, such as the potential electoral significance of an industry, were far less significant in determining strategic industry selection (Pekkanen 2003).

Of course, commitment to a developmental project is not as easy as it sounds, for at least two reasons. First, it requires broad support in the polity; something that electoral competition can weaken or undo. But on the plus side, support can also be built by virtue of the legitimacy of a project for shared growth. Second, as we have seen, developmental commitment is born of circumstance rather than produced by fiat (recall the external security imperative in East Asia). But again, on the plus side, commitment may also be cultivated and deepened. Nevertheless, one should note potential obstacles to commitment in many less-developed economies. The question raised by the North-East Asian

⁹ This section builds on Weiss (2010).

experience is this: in the absence of an external imperative or international driver, what might or could act to galvanize the political leadership in other settings to push through and stay the course of a transformative project? Is the experience of dispossession sufficient? For the post-colonial less-developed countries of today – mostly democracies characterized by significant ethnic and/or religious diversity – one might be tempted to say ‘possibly not’, since the history of discrimination against certain groups tends to prioritize a redressive-distributive approach, rather than a developmental one, as the primary focus for state activism (for example, South Africa). This emphasis is entirely understandable and, from a social justice perspective, important. The point is not to judge that priority as right or wrong. It is simply to offer some insight into why at least one critical ingredient – the developmental mindset that was notably present in East Asia – may find less fertile soil in which to take root in post-colonial countries. Instead, the temptation may be to try to do too many things at once, resulting in achieving too little.

East Asian Policy-Makers Insulated

In the East Asian context, this was a prestige-or honour-building exercise as much as a capacity-building one. It focused on the creation of a body of personnel and a pilot agency, with the capacity to coordinate resources and to develop and maintain a perspective that is independent from special interests. Insulation meant:

1. Recruiting and/or organizing a core cadre of elite personnel who were among the best and brightest, and who shared similar life experiences and cohered around the same value set. These were the caretakers of the national project, the ones who were responsible for setting the social goals, for coordinating the necessary resources and for ensuring that progress was monitored.
2. Protecting this ‘pilot body’ from corrupting pressures and special interests of a personal, patronage or political nature. This was achieved by remunerating state actors in a way that reflected the professionalism and importance of the office, which also built prestige into the office. It also meant prioritizing merit-based recruitment and a performance-based career track, both within the pilot body and more generally throughout the public sector.

East Asian Policy-Makers Connected

In East Asia this was a critical capacity-building exercise that went to the heart of effective strategizing and implementation. Its essence was (and, as some evidence suggests, continues to be) information exchange via the links established between government and industry that are essential to put the developmental project into action. These linkages enabled developmental leaders to mobilize the information needed to determine what kind of industry policy is viable for the particular context, and how it can be effectively implemented. In Japan, Korea and Taiwan a twofold connection was involved. The first connection was within the state: leaders instigated regular lines of communication between the pilot agency on the one hand, which has a view of the big picture; and its key industry policy bureaux on the other, which provided input based on first-hand interaction with industry and other experts. (In East Asia, many within these bureaux had

an engineering background, not one in economics or law, since engineers are problem-solvers and well placed to understand logistical and production-related issues.)

The second connection was between the state and non-state actors. This involved a number of steps. First, leaders established regular lines of communication, consultative mechanisms, both formal and informal, between the industry policy arms of the bureaucracy on one hand, and industry actors on the other. This continuing conversation between government and industry and others was used to leverage the expertise of political and economic actors, to discover the development opportunities – whether for innovation or for entering new markets – and to identify the constraints and obstacles to be removed. Second, leaders devised a policy strategy – that is, they identified the areas to prioritize and the inputs needed to achieve results – on the basis of this process. Which sectors to promote? Where to encourage investment? Which incentives in order to increase innovation? Answers were arrived at via a discovery process based on consultative mechanisms that enabled a continuing conversation with economic actors and experts, identifying where constraints and opportunities existed and how to overcome the obstacles. Third, leaders built in performance standards. Whatever the policy adopted and whatever the incentive structures that were put into place, effective implementation rested on specifying performance requirements. The policies and policy tools employed by East Asia's developmental states varied according to context and circumstances, but the need for performance requirements remained a constant.

In sum, the main lessons that can be extracted from the North-East Asian developmental-state experience for policy-makers in less-developed countries today are fundamentally about capacity-building, creating the basis for more effective decision-making and programme implementation. But it should also be said that no one has a magic recipe for development. Modesty is called for on the part of the analyst. Less-developed countries face many significant challenges that should not be downplayed.

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34. Development, ecology and the environment

Edward B. Barbier and Jacob P. Hochard

INTRODUCTION

A commonly held view is that because many of the poor people in developing regions are located in fragile environments, they must be responsible for the majority of the world's ecosystem degradation and loss – even though their livelihoods are directly affected by such environmental destruction. This perspective that poor people are mired in a two-way 'poverty–environment trap' has gained credence ever since it was asserted by the World Commission on Environment and Development (1987, 27): 'poor people are forced to overuse environmental resources to survive from day to day, and their impoverishment of their environment further impoverishes them, making their survival ever more uncertain and difficult.'

This chapter challenges this widespread perception of poverty–environment relationships in developing economies. Studies of poor households and communities suggest that their behavior with respect to the environment is more complex, as the range of choices and trade-offs available to the poor is affected by their access to key markets (for example, for land, labor and credit, as well as goods and services) and by the quality and state of the surrounding environment upon which their livelihoods depend (see Barbier 2012 for a review). In the absence of local labor markets capable of absorbing all the poor and landless households looking for work, or well-functioning rural credit markets to lend the needed capital, the landless and near landless in rural communities depend critically on the exploitation of common-property resources for their income and nutritional needs. Thus, it may be the 'assetless' poor who end up most dependent on exploiting the surrounding environment and its ecological services for survival. Thus, the environment is an important asset for poor households, and it is the state of the local environment as well as their access to key markets that affects how the poor utilize their resources and, in turn, their livelihood strategies.

Examining the development implications of this more complex relationship between poor people and the environment is the focus of this chapter. We begin by highlighting an important global trend, which is the increasing link between ecological scarcity and poverty in developing countries. This link is especially relevant to the poor located on less-favored, or marginal, agricultural land, which is often found in remote areas with limited market access. These marginal lands in remote locations can create significant environment–poverty traps. To understand why, it is important to identify the typical conditions facing the 'assetless' poor in such regions that influence their use of the surrounding environment.

Eradicating such persistent problems of geographically concentrated rural poverty in developing economies will require a new policy strategy. This strategy needs to be targeted specifically to tackle the structural problem of the clustering of impoverished households in marginal and remote rural areas with poorly integrated and functioning

markets. This calls for a range of policies that include both protecting ecosystem services critical to the livelihoods of the poor and providing economic services vital to increasing access and provision of key markets. This chapter concludes by discussing the key elements of such a poverty-alleviation strategy.

ECOLOGICAL SCARCITY AND POVERTY IN POOR ECONOMIES

From an economic perspective, ecological scarcity has been defined as the loss of myriad benefits, or ‘services’, as ecosystems are exploited for human use and activity (Barbier 1989, 96–97; see also Barbier 2011, Ch. 9). Certainly, at a global level, ecosystems and their services are in decline. An important indicator of the growing ecological scarcity worldwide was provided by the Millennium Ecosystem Assessment (MA 2005), which found that more than 60 percent of the world’s major ecosystem goods and services were degraded or used unsustainably. Some important benefits to humankind fall in this category, including fresh water, capture fisheries, water purification and waste treatment, wild foods, genetic resources, biochemicals, wood fuel and pollination; as well as spiritual, religious and aesthetic values; and the regulation of regional and local climate, erosion, pests and natural hazards.

For many developing economies, ecological scarcity is also manifesting itself in another way: it is contributing to the economic vulnerability of the rural poor. Increasing ecological scarcity is disproportionately affecting the world’s poor in rural areas, who depend critically on many ecosystem goods and services for their livelihoods (Barbier 2005, 2010, 2012; MA 2005; TEEB 2010; Wunder 2008). As the world’s rural poor continue to be concentrated in the less ecologically favored and more remote areas of developing regions, their livelihoods become intricately linked with exploiting fragile environments and ecosystems (Barbier 2005, 2010, 2012; International Water Management Institute 2007; Dercon 2009; Fan and Chan-Kang 2004; Sunderlin et al. 2008; World Bank 2003, 2008). Such clustering of poor rural populations is likely to continue into the foreseeable future, given current global rural population and poverty trends (Chen and Ravillon 2007, 2010, 2012; Dercon 2009; Population Division of the United Nations 2008).

Since 1950, the estimated population in developing economies on ‘fragile lands’ prone to land degradation has doubled (World Bank 2003). These fragile environments consist of upland areas, forest systems and drylands that suffer from low agricultural productivity, as well as areas that present significant constraints for intensive agriculture. Barbier (2010, 2012) shows that, for a sample of 92 low- and middle-income economies, the incidence of rural poverty rises with the share of the total population concentrated on fragile lands, as defined by World Bank (2003). Although the average poverty rate across all economies is 45.3 percent, the rate falls to 36.4 percent for those countries with less than 20 percent of their population in fragile environments. For those with more than 50 percent of their populations in marginal areas, however, the incidence of rural poverty rises to 50 percent or more.

Using spatial data sets from several sources, Table 34.1 provides estimates for 2010 of the share of rural populations on less favored, or ‘marginal’, agricultural land. This consists of land that is susceptible to low productivity and degradation, because it is

Table 34.1 Rural population on less-favored agricultural lands, 2010

	Population in 2010 (millions)		
	Rural population (1)	Rural population on less-favored agricultural land (2)	% share (2)/(1)
Developing countries	4248.6	1499.7	35.3
East Asia & Pacific	1499.1	709.4	47.3
Europe & Central Asia	180.7	97.7	54.1
Latin America & Caribbean	336.1	109.2	32.5
Middle East & North Africa	237.2	50.4	21.3
South Asia	1284.0	309.7	24.1
Sub-Saharan Africa	711.4	223.2	31.4
Developed	415.3	166.9	40.2
World	4663.9	1666.6	35.7

Notes:

Less-favored agricultural land consists of irrigated land on terrain greater than 8% median slope; rain-fed land with a length of growing period (LGP) of more than 120 days but either on terrain greater than 8% median slope or with poor soil quality; semi-arid land (land with LGP 60–119 days); and arid land (land with LGP <60 days).

These various land areas were determined by employing in Arc GIS 10.1 the datasets from the FAO Global Agro-Ecological Zones (GAEZ) Data Portal version 3 (<http://gaez.fao.org/>) combined with national boundaries from the Gridded Population of the World, Version 3 (GPWv3) of the Center for International Earth Science Information Network (CIESIN) and Centro Internacional de Agricultura Tropical (CIAT). Agricultural land extent was obtained from the Pilot Analysis of Global Ecosystems (PAGE) (<http://www.ifpri.org/dataset/pilot-analysis-global-ecosystems-page>), and rural populations determined from the rural–urban extent dataset that was published as part of CIESIN Global Rural Urban Mapping Project (GRUMPv1). GIS estimates are for people per km² in 2010.

Developing countries are all low and middle-income economies with 2012 per capita income of \$12 615 or less (World Bank 2014).

constrained by slope, poor soil quality or limited rainfall. Globally, around 1.7 billion people, or approximately 36 percent of the rural population, can be found on less favored agricultural land. Almost all the rural population on marginal land is located in developing countries (1.5 billion people), which accounts for 35 percent of the rural population. However, this share varies considerably by region. For example, the East Asia and Pacific region has both the largest number of people on less-favored agricultural land (709 million), and nearly half the rural population located on such land. The Middle East and North Africa region has 50 million people on marginal land, which is just over one-fifth of its rural population.

The tendency for the rural poor to be clustered in more marginal environments prone to land degradation and low productivity is also supported by studies at the regional and country levels, although important differences exist within and between countries. Such a poverty–environment nexus appears to be prevalent in three of the poorest countries in South-East Asia: Cambodia, Laos and Vietnam (Dasgupta et al. 2005; Minot and

Baulch 2005). In Cambodia, the core poor in rural areas appear to be located in areas that are already heavily deforested, although poor populations tend also to be more concentrated in the lowlands rather than steeply sloped lands. In Laos, the poorest rural provinces in the north and north-east also have the highest incidence of poverty, with poor households located mainly in forested areas and the highlands. In Vietnam, large poor populations confined to steep slopes exist in the provinces comprising the northern and central highlands, but extensive rural poverty is also found along the north central coast and the Red River Delta.

Despite its robust growth and reduction of poverty overall, China has seen rural poverty persist and concentrate geographically in the relatively poor agricultural areas of the west and south-west (Gustafsson and Zhong 2000; Jalan and Ravallion 2002; Kelly and Huo 2013; Olivia et al. 2011; Ravallion and Chen 2007). In general, households living in the lowlands and plains are less poverty-prone than those living in hilly and mountainous regions, which contain less productive and more degradable land. As poverty declines in coastal and lowland areas, the rural poor are increasingly found in upland areas. There are still more than 100 million rural poor in China living on less than \$1 per day, and most of them live in western, inland China in mountainous areas with low rainfall or on marginal lands with low agricultural potential (Olivia et al. 2011). For example, the proportion of China's rural poor living in the mountains increased from less than one-third in 1988 to a majority in 1995 (Gustafsson and Zhong 2000).

A study of the spatial pattern of rural poverty in Bangladesh concludes that 'the pockets of high poverty incidence generally coincide with the ecologically poor areas' (Kam et al. 2005, 564). Overall, four such areas could be considered poverty 'hot spots' in Bangladesh: the low-lying depression area in the north-east; the drought-prone upland area in the north-west; several flood-prone subdistricts fringing major rivers; and several of the subdistricts in the south-eastern hilly regions. A similar poverty mapping exercise in Sri Lanka reveals that regions with a lack of availability of water and poor-quality land are most associated with high rural poverty and food insecurity (Amarasinghe et al. 2005). Poverty mapping in Syria indicates that rural areas with shallow soils or unfavorable topography, such as steep slopes, generally display lower regional income levels (Szonyi et al. 2010). In Mexico, the rural poor are also concentrated in these particular regions, especially those with marginal land (Bellon et al. 2005). Poverty is especially concentrated in mountainous regions in central, southern and north-west Mexico. As the authors note, 'these "islands" of poverty exhibit specific circumstances such as the presence of indigenous populations, higher rainfall, steep slopes, erodible soils and lack of access to services', reflecting that these areas are both ecologically fragile and remote (Bellon et al. 2005, 489).

Much of Africa's population, and its rural poor, are located in ecologically fragile regions of landlocked, resource-scarce countries (Collier 2007; Fan and Chan-Kung 2004). But even in coastal African economies, the rural poor continue to be clustered in marginal environments. For example, in Kenya locations with poor-quality soil, a high percentage of steep land and variable rainfall have much higher poverty levels among their populations compared to areas with more favorable land and environmental conditions (Okwi et al. 2007; Radeny and Bulte 2011). Throughout Uganda, crop income is positively associated with soil fertility (Yamano and Kijima 2010). In Rwanda, even resource-poor households with low-quality land that are located close to markets tend

to have the lowest levels of income and consumption expenditures (Ansoms and McKay 2010).

The rural populations on marginal lands of developing economies also tend to be concentrated in remote areas. Around 430 million people in developing countries live in locations with poor market access that require five or more hours to reach a market town of 5000 or more, and nearly half (49 percent) of these populations are located in arid and semi-arid regions characterized by frequent moisture stress that limits agricultural production (World Bank 2008). As indicated in Table 34.2, around 22 percent of the rural populations on marginal lands in developing countries are located five or more hours from a market city with a population of 50000 or more. The regions with the largest share of their rural populations in marginal and remote areas are sub-Saharan Africa (30 percent), East Asia and Pacific (24 percent) and South Asia (16 percent). These three regions also tend to have the highest incidence of national poverty.

According to Dercon (2006, 23), in Ethiopia, 'the poor contain mainly households with poor endowments in terms of poor land, far from towns or with poor road infrastructure'. Similarly, the western, inland and mountainous regions of China where the rural poor tend to be located are also remote regions that lack integration with major markets (Olivia et al. 2011). Remoteness is also a factor in the land-use poverty traps found in Amazonia, where isolated, subsistence-based shifting cultivation systems can lead to farmers failing to invest in perennial cash crops and forest fallows (Coomes et al. 2011). The poor in rural and remote semi-arid India also seem to be caught in an asset-poverty trap, especially among households from a lower caste, with smaller land holdings and less education (Naschold 2012).

In Tanzania, rural poverty appears closely related to access to regional urban centers and markets rather than distance to roads or to the capital, Dar es Salaam (Minot 2007). In Rwanda rural households in remote rural areas are isolated from major markets and lack public services and are among the poorest, attain low education levels and accumulate little farm capital (Ansoms and McKay 2010). In Uganda, distance to the nearest urban center and the poor quality of roads appear to negatively affect crop income (Yamano and Kijima 2010). Overall, the lack of integration of the rural poor in remote areas in regional and national markets is a major barrier preventing many smallholders from 'break[ing] out of the semi-subsistence poverty trap that appears to ensnare much of rural Africa' (Barrett 2008, 300).

The rural poor will continue to be clustered on marginal lands, in fragile environments and remote areas, given current global rural population and poverty trends. First, despite rapid global urbanization, the rural population of developing regions continues to grow, albeit at a slower rate in recent years. From 1950 to 1975, annual rural population growth in these regions was 1.8 percent, and from 1975 to 2007 it was just over 1.0 percent (Population Division of the United Nations 2008). Second, the vast majority of the world's poor still live in rural areas, even allowing for the higher cost of living facing the poor in urban areas. In general, about twice as many poor people live in rural than in urban areas in the developing world (Chen and Ravallion 2007, 2010, 2012). Around 30 percent of the rural population in developing economies survive on less than US\$1 a day and 70 percent live on less than US\$2 a day, yet the respective poverty rates in urban areas are less than half of these rural rates (Chen and Ravallion 2007, 2010, 2012).

Table 34.2 Rural population on less-favored agricultural land, remoteness and poverty, 2010

	Population in 2010 (millions)			
	Rural population on less-favored agricultural land	Remote (%)	National poverty headcount (%)	National poverty gap (%)
Developing countries	1499.7	21.5	20.63	6.30
East Asia & Pacific	709.4	24.4	12.48	2.82
Europe & Central Asia	97.7	12.6	0.66	0.21
Latin America & Caribbean	109.2	13.5	5.53	2.89
Middle East & N. Africa	50.4	14.2	2.41	0.55
South Asia	309.7	16.0	31.03	7.09
Sub-Saharan Africa	223.2	29.4	48.47	20.95
Developed	166.9	5.9		
World	1666.6	19.9		

Notes:

Less-favored agricultural land consists of irrigated land on terrain greater than 8% median slope; rain-fed land with a length of growing period (LGP) of more than 120 days but either on terrain greater than 8% median slope or with poor soil quality; semi-arid land (land with LGP 60–119 days); and arid land (land with LGP <60 days). These various land areas were determined by employing in Arc GIS 10.1 the datasets from the FAO Global Agro-Ecological Zones (GAEZ) Data Portal version 3 (<http://gaez.fao.org/>) combined with national boundaries from the Gridded Population of the World, Version 3 (GPWv3) of the Center for International Earth Science Information Network (CIESIN) and Centro Internacional de Agricultura Tropical (CIAT). Agricultural land extent was obtained from the Pilot Analysis of Global Ecosystems (PAGE) (<http://www.ifpri.org/dataset/pilot-analysis-global-ecosystems-page>), and rural populations determined from the rural-urban extent dataset that was published as part of CIESIN Global Rural Urban Mapping Project (GRUMPv1). GIS estimates are for people per km² in 2010.

Market accessibility was used to identify remote areas using Nelson (2008) as released by the Global Environment Monitoring Unit of the Joint Research Centre of the European Commission. Market access is identified as less than five hours of travel to a market city with a population of 50 000 or more.

Poverty data from PovcalNet: the online tool for poverty measurement developed by the Development Research Group of the World Bank (<http://iresearch.worldbank.org/PovcalNet/>). Poverty headcount is the percentage of population with consumption or income per person below the \$1.25 per day poverty line. Poverty gap is the mean distance below the \$1.25 per day poverty line as a proportion of the poverty line.

Developing countries are all low and middle-income economies with 2012 per capita income of \$12 615 or less (World Bank 2014).

THE ‘ASSETLESS’ POOR AND THE ENVIRONMENT

Because the rural poor of developing economies are often concentrated in ecologically fragile and remote locations, these areas can become significant poverty traps. To understand why, it is important to identify the typical conditions facing the ‘assetless’ poor in such regions that influence their use of available natural capital.

The poorest rural households in developing economies have very few productive assets (Banerjee and Duflo 2007). First, land is one of the few productive assets owned by the rural poor, and almost all households engage in some form of agriculture, but the size of landholdings tends to be very small. Second, poor rural households tend to rely on selling

their only other asset, unskilled labor. Agriculture is generally not the mainstay of most of these households; instead, they generally obtain most of their income from off-farm work as agricultural laborers, or in unskilled paid work or occupations outside of agriculture. However, when households do engage in outside employment, they tend to migrate only temporarily and over short distances. Permanent migration over long distances for work is rare for most poor rural households (Banerjee and Duflo 2007). Thus, given the lack of ownership of assets by the rural poor and their tendency to stay where they are located, it is not surprising that the livelihoods of the 'assetless' poor are often the most dependent on their surrounding natural environments.

The scale of this dependence may be very extensive in some developing regions. For example in Southern Malawi households derive 30 percent of their income on average from exploiting 'common' forests (Fisher 2004). Households that are especially lacking in land, education and livestock (goat herds) are more reliant on low-return forest activities, such as sales of forest-based crafts (bamboo baskets and mats, grass brooms and wood-fired pots), roof-thatching and brick-burning, sales of prepared foods and drink, sales of firewood and bamboo, and traditional medicines. Similarly, in both Cameroon and South Africa, the poorest households used more non-timber forest products per capita, such as firewood, wild fruits, edible herbs and grass hand brushes, than wealthier households (Gbetnkom 2008; Shackleton and Shackleton 2006). In Burkina Faso, Ghana and Uganda, non-forest products play a critical role in rural livelihoods and in reducing risks from economic shocks, especially for women and the poorest (Debela et al. 2012; Pouliot and Treue 2013). Such findings appear to be consistent with studies of income diversification across Africa, which show that the 'assetless' poor diversify into low-return activities based on exploiting common property environmental resources, but with little hope of escaping the poverty trap (Barrett et al. 2001; Dercon 1998).

This link between asset poverty, lack of income opportunities and resource extraction as insurance may be very significant in many tropical forest regions, where the livelihoods of the poor often depend on the extraction of biological resources in fragile environments (Adhikari 2005; Coomes et al. 2011; McSweeney 2005; Shone and Caviglia-Harris 2006; Pattanayak and Sills 2001; Sunderlin et al. 2008; Takasaki et al. 2004; Vedeld et al. 2004; Wunder 2001). For example, Vedeld et al. (2004) conducted a meta-analysis of 54 case studies globally of rural communities that live in or near tropical forests and found that on average 22 percent of household income in these communities depends on forest resources. However, the proportion of forest income was significantly higher for poorer households (32 percent) compared to the non-poor (17 percent). Similarly, López-Feldman and Wilen (2008) found that non-timber forest-product use is mainly conducted by households in Chiapas, Mexico, with low opportunity costs of time and fewer income-generation opportunities. And in Palawan (the Philippines), hunting pressure on fauna was shown to be inversely related to farm size and agricultural productivity, but positively correlated with labor availability (Shively 1997).

The state of the local environment may also affect how the poor utilize their resources and, in turn, their livelihood strategies. In India, Narain et al. (2008) found that in villages surrounded by good-quality forests, the poorest households depend on forest resources for as much as 41 percent of their income compared to 23 percent for the richest households. In areas where the forests are in a poor state, both the rich and poor's use of

common resources decline, but more so for the poor; both types of households depend on forests for only around 9 to 14 percent of their income. In West Bengal, almost 10 percent of the time of the average household is spent on gathering fuel, either for use at home or for sale (Banerjee and Duflo 2007). In general, throughout many tropical forested regions, there appears to be a relatively high dependence on forests for livelihoods in areas of high forest cover and high poverty, as poor households depend on the forests both for supporting their economic livelihoods and as a source of new land (Coomes et al. 2011; Sunderlin et al. 2008).

The range of choices and trade-offs available to the poor, and their dependence on the surrounding environment, is also affected by their access to key markets – such as land, labor and credit – as well as the quality and state of the surrounding environment upon which their livelihoods depend (Barbier 2005, 2010; Carter and Barrett 2006; Caviglia-Harris 2004; Gray and Mosley 2005; Kelly and Huo 2013; Pattanayak et al. 2003; World Bank 2008). As summarized by Dasgupta (1993, 475): ‘in rural communities of poor countries a great many markets of significance (for example, credit, capital, and insurance) are missing, and a number of commodities of vital importance for household production (potable water, sources of fuel and fodder, and so forth) are available only at considerable time and labour cost’. In the absence of local labor markets capable of absorbing all the poor and landless households looking for work, or well-functioning rural credit markets to lend the needed capital, the landless and near landless in rural communities fall back on the use of common-property and open-access resources for their income and nutritional needs. Because of missing or inaccessible markets, therefore, the ‘assetless’ poor often depend on exploiting the surrounding environment and its ecological services for survival (Barbier 2010). This is especially the case in remote rural areas, where local markets are isolated from larger regional and national markets and essential public services are lacking (Barrett 2008).

Lack of assets and access to key markets may also constrain the ability of poor households to adopt technologies to improve their farming systems and livelihoods. In conducting a meta-analysis based on 120 cases of agricultural and forestry technology by smallholders across the developing world, Pattanayak et al. (2003) found that credit, savings, prices, market constraints and access to extension and training, as well as tenure and plot characteristics such as soil quality and landholding size, are important determinants of adoption behavior. Not surprisingly, the result is low adoption rates for sustainable agricultural and forestry technologies among poor smallholders, especially those with lower-quality soils. In Mozambique, market access through an adequate road network and transport services is crucial in determining the successful adoption of improved agricultural technologies and may even compensate for the disadvantages of marginal environments, such as poor rainfall (Cunguara and Darnhofer 2011). In Nepal and Ethiopia, the lack of vital infrastructure, such as roads and irrigation, severely constrains the ability of poor farmers in remote and environmentally fragile areas to adopt new technologies and increase agricultural incomes (Dercon et al. 2009; Dillon et al. 2011).

Given that poor rural households engage in some agriculture and are highly dependent on outside employment for income, their livelihood strategies across these activities must be interdependent. In particular, as the ‘natural’ assets and land available to them degrade or disappear, the rural poor are likely to search for more paid work to increase their earn-

ings from outside jobs. Such environmental degradation effectively lowers the reservation wage of the poor for accepting paid work, as households are forced to look for additional work to make up the lost income (Barbier 2007, 2010; Dasgupta 1993; Jansen et al. 2006; Pascual and Barbier 2006, 2007).

For example, Barbier (2007) found that mangrove deforestation is likely to increase the probability that both males and females from coastal communities in Thailand participate in outside work, but the number of hours worked in outside employment by males declines with any mangrove loss, while the number of hours worked by females rises. Households appear to be highly dependent on males continuing to work on the physically demanding mangrove-dependent activities, such as fishing and collecting products; and as mangrove resources decline, even more male labor will be devoted to exploiting them to maintain the mangrove-based income and subsistence required by the households. Females are more likely to be sent out for paid employment to earn needed cash income as local mangrove resources decline. In contrast, in the Yucatán, Mexico, in response to increased population density and declining soil fertility, only the better-off households are able to devote more labor to off-farm employment; in contrast, the poorer households allocate even more labor to shifting cultivation, thus perpetuating problems of shortened fallows and declining yields (Pascual and Barbier 2006, 2007). On the other hand, in the rain-fed upland areas of Honduras, favorable rainfall during the secondary season lowers the probability that a household's income-earning strategy focuses on off-farm work, probably because it makes their own farm vegetable production more profitable (Jansen et al. 2006).

Evidence from the Philippines confirms that higher wages for off-farm employment can draw away smallholder labor that would otherwise be used for clearing more forests for on-farm agricultural production (Coxhead et al. 2002; Shively and Fisher 2004). However, poorer households in remote locations are the least likely to participate in off-farm employment, as they face higher transaction and transportation costs (Shively and Fisher 2004). Bluffstone (1995) found similar results in Nepal: higher wages reduce smallholder deforestation, but only if there are paid employment opportunities available in remote areas. Non-farm employment and improved wages in Honduras have also been associated with investments to improve cropland quality in Honduras and improved resource conditions in Uganda (Pender 2004). In El Salvador, as the employment opportunities and income per capita of agricultural wage owners decline, they rely increasingly on cultivating land for subsistence production. But rising income growth also enables poor and near-poor households to acquire more land for cultivation as a precaution against possible future income losses (González-Vega et al. 2004). In Honduras, there is concern that the 30–50 percent decline in real wages over the past decade has shifted upland households to income strategies emphasizing hillside cropland expansion and resource degradation that has worsened rural poverty (Jansen et al. 2006). Similarly, in the Yucatán, because they have limited access to off-farm employment, the least-poor households tend to oversupply labor to shifting cultivation and thus clear too much forest land (Pascual and Barbier 2007).

Although higher non-farm income may discourage cropland expansion and deforestation, it does not necessarily follow that households will invest more in conserving and improving existing land. For example, Holden et al. (2004) found that, in the Ethiopian highlands, better access to low-wage non-farm employment improved the income of

households substantially; but because it also reduced farming activities and food production, increased non-farm income also undermined the incentives for soil conservation. Similarly, Pascual and Barbier (2007) found evidence that the poorest households in the Yucatán have a backward-bending supply curve for off-farm labor. As real wage rates rise, these households actually decrease their supply of labor to outside employment and increase forests clearance for shifting cultivation. In contrast, richer households respond to higher real wages by supplying more labor to outside work, thus reducing shifting cultivation and deforestation. In Malawi, the factors reducing forest pressure include favorable returns to non-forest employment, secondary education of the household head, and wealth (Fisher et al. 2005).

POLICIES FOR TARGETING POVERTY ALLEVIATION IN LESS-FAVORED AND REMOTE AREAS

Eliminating these structural features that define the persistent problem of widespread rural poverty requires a new development strategy. Specific policies need to be targeted at the poor where they live, especially the rural poor clustered in fragile environments and remote areas. If policies are to be targeted to both improve rural livelihoods and protect the fragile environments upon which many poor people depend, such a strategy must take into account many important factors influencing households' behavior, including lack of income opportunities or access to key markets for land, labor and credit, and the availability and quality of natural resources, including land, to exploit (Barbier 2010, 2012). Nevertheless, there are several ways in which a strategy could be developed to target improving the livelihoods of the poor.

The first is to provide financing directly, through involving the poor in payment-for-ecosystem-services schemes and other measures that enhance the environments upon which the poor depend. Payments for the conservation of standing forests or wildlife habitat are the most frequent type of compensation programs used currently in developing countries, and they have been mainly aimed at paying landowners for the opportunity costs of preserving natural landscapes that provide one or more diverse services: carbon sequestration, watershed protection, biodiversity benefits, wildlife protection and landscape beauty (Grieg-Gran et al. 2005; Wunder 2008). Wherever possible, the payment schemes should be designed to increase the participation of the poor, to reduce any negative impacts on non-participants while creating additional job opportunities for rural workers, and to provide technical assistance, access to inputs, credit and other support to encourage poor smallholders to adopt the desired land-use practices. More effort must be devoted to designing projects and programs that include the direct participation of the landless and near-landless. Alternatively, as in the case of China's Sloping Land Conversion Program, the payments can assist the transition from marginal land cultivation to non-farm employment (Kelly and Huo 2013).

Even in a poor African economy, such as Tanzania, a correctly designed 'payment for ecosystem services' (PES) program can provide an important source of funding for sustainable land-use practices in agriculture while leading to greater watershed protection (Branca et al. 2011). In the upstream catchment area of the Ruvu River, poor farmers face financial and technical obstacles to adopting sustainable land management that

reduces soil erosion and enhances downstream water quality. By providing institutional, technical and financial support to farmers, a PES scheme for watershed protection delivers on these environmental goals, while at the same time boosting crop productivity from improved soil conservation and fertility and thus raising farm incomes. The PES scheme is now trying to enhance sustainability by investing in an appropriate legal and institutional framework for long-term financing and expansion of sustainable land management among farmers to improve watershed management.

A second objective is to target investments directly towards improving the livelihoods of the rural poor, thus reducing their dependence on exploiting environmental resources. For example, in Ecuador, Madagascar and Cambodia poverty maps have been developed to target public investments to geographically defined subgroups of the population according to their relative poverty status, which could substantially improve the performance of the programs in term of poverty alleviation (Elbers et al. 2007). Such targeting also has the potential to enhance the effectiveness of geographically targeted asset-transfer schemes in Uganda (Long et al. 2013). A World Bank study that examined 122 targeted programs in 48 developing countries confirms their effectiveness in reducing poverty, if they are designed properly (Coady et al. 2004). A review of poverty alleviation programs in China, Indonesia, Mexico and Vietnam also finds evidence of ‘the value in specifically targeting spatially disadvantaged areas and households’, although the benefits are larger when programs, such as PROGRESA (the Education, Health, and Nutrition Program) in Mexico, are successful in employing second-round targeting to identify households in poor locations, thus reducing leakages to non-poor households (Higgins et al. 2010, 20).

Ultimately, however, it is the lack of access of the rural poor in less-favored areas to well-functioning and affordable markets for credit, insurance and land, and the high transportation and transaction costs, that prohibit the poorest households in remote areas from engaging in off-farm employment. These are the major long-run obstacles that need to be addressed. Such problems lie at the heart of the poverty–environment trap faced by many poor people in remote and less-favored areas (Barbier 2010). For example, Carter and Barrett (2006, 195) note that the existence of a poverty-trap threshold ‘depends on the degree to which the household is excluded from intertemporal exchange through credit, insurance or savings, whether formally or through social networks. A household with perfect access to capital over time and across states of nature would not face a critical threshold.’ Similarly, Shively and Fisher (2004, 1366) maintain that ‘policies to reduce deforestation should focus on increasing returns to off-farm employment, strengthening rural credit markets, and ensuring farmers have secure tenure over existing agricultural land’.

Finally, in many developing countries, the current legal framework and formal institutional structures for resource management do not allow local communities any legal rights to establish and enforce control over the ecosystem goods and services upon which the livelihoods of these communities depend (Aswani et al. 2012; Chhantre and Agrawal 2008). Establishing an improved institutional framework does not necessarily require transferring full ownership of natural resources to local communities, but could involve co-management by governments and local communities that would allow, for example, the participation of the communities in decisions concerning the long-term management, development and utilization of these resources. Without such institutional involvement

of local communities, multiple problems can arise from competing interests amongst stakeholders, undeveloped or inappropriate governance structures, poor science or lack of political will, which can ultimately undermine well-intentioned efforts to improve poor people's livelihoods (Aswani et al. 2012; Chhantre and Agrawal 2008).

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35. Competition, competition policy, competitiveness, globalization and development

*Ajit Singh**

INTRODUCTION

This chapter explores the connections between globalization, competition, competition policy and competitiveness. These concepts and the relationships between them have emerged as important issues in the current development debate at both national and international levels. The significance at the national level arises from the privatization and liberalization policies which have been adopted by many developing countries in recent decades. The international significance is directly related to globalization and the continuing deep integration of the world economy through multinational companies and the fast growth of global trade.

The external dimension is at present particularly important because of the worldwide economic downturn. In these circumstances multinational companies and governments try to evade their international commitments by relaxing free competition in relation to particular coveted industries and products. The return of protection in advanced industrial countries is increasingly well documented. However, it is not yet a major fault for the international competition system. In spite of the many difficulties of enforcing fair rules of the World Trade Organization (WTO), most advanced and emerging countries by and large work within the system and, so far, there have been relatively few infringements of the rules.

Another reason for the importance of the global dimension is the failure of the Doha Round of trade negotiations, which has made it more difficult for the relevant international institutions, such as the World Trade Organization, to further their agenda for free trade in the international marketplace as well as providing enough space for development for emerging countries. Appropriate and duly agreed-upon and enforced competition policies comprise one way for the international organizations to achieve these objectives. However, for such policies to work they have to overcome not only economic but also political issues which are complex and differ between countries.

Turning briefly to the concept of competition itself, it is central to neoclassical analysis and the theory of growth which follows from such a perspective. At the simplest level, competition theory asserts that those countries which have the highest rate of technical progress will also have the highest rate of growth. Further, the greater or more intense the competition, the greater the rate of technical progress. On the basis of these

* I thank the editors of the volume for their trenchant criticisms but also helpful advice on this chapter. The author is alone responsible for any errors which remain. In writing this chapter, I have relied on my previous articles in this area: Singh (2002, 2003a, 2003b, 2007). I have also borrowed material from Singh and Dhumale (1999), Howes and Singh (2000), Glen et al. (2000, 2002, 2003) and Singh (2003c). This chapter also updates the analyses of these papers.

two relationships, the World Bank in its landmark 1991 World Development Report¹ asserted: 'Competitive markets are the best way yet found for efficiently organizing the production and distribution of goods and services. Domestic and external competition provides the incentives that unleash entrepreneurship and technological progress.'

This view is not universally accepted and will be challenged in this chapter. Similarly, competitiveness is a concept that is somewhat different from competition per se. In some polemical writings in the 1990s Paul Krugman (1997) made the notion of competitiveness famous by declaring it to be a dangerous obsession, and terming it 'pop internationalism'. Howes and Singh (1999) noted: 'with pop internationalism, he associates the idea that the recent ills of the US [United States] economy – eroding real wages, stagnating living standards, rising inequality and unemployment – are the consequences of a major erosion of the industrial base due to international competition.' Krugman went on to claim that the notion of competitiveness might be useful when applied to a corporation but was utterly meaningless when applied to a nation. Krugman's analysis will be challenged in this chapter, and it will be shown why, contrary to his assessment, competitiveness is a useful concept and is important for economic policy.

So far I have introduced two of the five concepts in the title of the chapter. The third concept is that of competition policy. This consists of policies to change corporate conduct, structure and behaviour so as to maintain competition – national and international. Fourthly, I introduce the question of globalization. This has many different meanings for different people, but in order to keep the discussion unambiguous this chapter regards globalization as consisting of free trade, free capital flows but not free labour markets (see, further, Rodrik 2012). The latter, however, are assumed to be flexible at the national level. I have adopted this procedure not because it is correct in economic theory, but simply to make my analyses comparable with that of the World Bank and those of other orthodox economists. From an economic perspective, the more attractive methodology would assume free labour markets analogous with free capital markets.

The main purpose of this chapter is to explore the relationship between these four concepts and economic development. For reasons of space and in order not to lose the focus of this discussion, the latter is taken to be simply economic growth. Agencies such as the World Bank regard competition policy as essential for economic development. Implicit in the orthodox analysis is also the notion that the more competition, the better. Or, in other words, the optimal competition is the maximum competition. Both of these propositions are subject to challenge.

This chapter contributes by its conceptualization of the main issues which arise in the modern discussion of competition and competition policies in economic development. It also contributes by its extensive treatment of the international dimensions of the subject. Most importantly, it is among the few publications which put economic development at centre stage for competition and related policies. It also contributes by its proposal for the establishment of a development-oriented international competition authority.

As there are a number of concepts being used in this chapter, from a pedagogical point of view it may be useful at this stage to provide a summary of the main conclusions:

¹ This report, according to the World Bank President, represented 40 years of development thinking by the Bank's economists. It is an important document which provides the World Bank's views on core development issues.

1. Even if they did not do so in the past, developing countries need a competition policy today, for two main reasons:
 - a. The advanced capitalist economies are subject periodically to gigantic international cross-border as well as huge domestic merger movements. To cope with such mergers and to protect themselves from involuntary and harmful takeovers of domestic firms, developing countries need a competition policy.
 - b. There are significant structural changes within developing countries themselves, arising from privatization and deregulation, which many of these countries had accepted during the Washington Consensus period.
2. Unless regulatory changes are made, with privatization there is a danger of replacing public monopolies with private monopolies. It is worth noting in this context that public monopolies are in general to be preferred to private monopolies, for the simple reason that public monopolies often carry a legal injunction to advance the welfare of citizens. By contrast, the main objective of the private firm is to maximize shareholder value.
3. In the first and only comprehensive study of the intensity of competition in emerging markets, Glen et al. (2000) reported the astonishing results that, as conventionally measured, the intensity of competition is lower in the developed countries than in developing countries. Despite all the new methodology which has been introduced in recent years in the persistence-of-profitability studies, Glen et al.'s (2000) results still stand for emerging markets.²
4. The above is not just a statistical result, but it has a solid economic foundation, which is explained in this chapter.
5. Analysis and evidence indicate that maximum competition is not necessarily optimal in terms of dynamic efficiency.
6. There is little evidence that the international cross-border merger waves of the period before the global crisis of 2008 to 2012 enhanced global economic efficiency any more than did the largely domestic earlier merger waves. See Singh (2007) and Scherer (1994).³
7. The current competition policies in the United Kingdom (UK) and the European Union (EU) are unsuitable for developing countries: countries at different levels of development and governance capacities require different types of competition policies. Nevertheless, developing countries have much to learn from the experience of Japan and Korea in blending competition policies with industrial policies.
8. It is argued here that the present competition policy discourse, in which the WTO plays a major role, is unfair to developing countries. The very concepts used in the WTO discussions in the international fora are prejudicial to the interests of developing countries. To make these concepts development-friendly, a new

² There are two other studies of the persistence of profits in developing countries, by Kambhampati (1995) and Yurtoglu (2004). They are each for a single country: Kambhampati studied India, and Yurtoglu studied Turkey.

³ It has been suggested that mergers may decrease competition rather than increasing it. In theory and in practice either outcome is possible depending on the circumstances. Mergers between oligopolistic firms may lead to more rather than less competition.

language is required to replace the WTO concepts of most-favoured-nation treatment, national treatment and market access.

9. This chapter presents a proposal for a development-oriented international competition authority to control anti-competitive conduct and growth by mergers of large multinational companies.

COMPETITION POLICY IN EMERGING COUNTRIES

I start my substantive discussion of emerging markets with the important question of how competitive these markets are. Do they need a new competition policy to encourage competition and to foster economic development? The record indicates that until recently very few developing countries had introduced competition policies. The United Nations Conference on Trade and Development (UNCTAD 2000) suggests that until 1990 only 16 developing countries had a formal competition policy. With encouragement and technical assistance from international financial institutions and from the WTO, 50 countries completed legislation for competition laws in the 1990s. This may seem like good progress, but, as Scherer (1994) pointed out, it takes about ten years for countries to acquire the necessary expertise and experience to implement such laws effectively after the primary legislation has been approved by the legislature. Scherer was being overoptimistic. Mendoza et al. (2012) conclude from their recent review of the empirical literature and the experience of South Korea, China, India and Indonesia with respect to competition policies that what emerges is a picture of a 'delicate, balancing act' between policies to attain the advantages of industrial concentration and those that foster market competition in different countries' economic development trajectories. The imposition of competition laws is quite chaotic, and their success depends on the coherence with the country's overall development strategy. The authors suggest that interest groups that benefit from initial industrial support policies will typically resist the introduction of competition laws and policies.

Table 35.1 provides a brief account of the competition laws in practice that have so far been enacted in the above countries, except India. The Indian situation is even more complicated, as Bhattacharjea (2013) suggests in his excellent article on the new Indian legislation on competition policy. In the last ten years (2006–2015, while the competition legislation was being revised, the old competition Act, called the Monopoly and Restrictive Trade Practices Act (MRTP), was still in operation. Bhattacharya's research shows that there were very few cases which were tried and which pertained to antitrust. Most cases under the MRTP were concerned with consumer welfare issues, including many concerning the clarifications of the law. It remains to be seen how the competition law will work in a developing country with its own strong legal traditions. It may take another ten years before it could be said that the country has a coherent competition policy.

Nevertheless, the main reason why developing countries did not have competition policies in the past would appear to be that these were not much needed. This was in part due to considerable state control over economic activity, and if the government thought there was anti-competitive behaviour by some corporations or industries it intervened directly and fixed prices, such as for medicine and other essential products. In addition state-owned industries were not allowed to charge monopoly prices.

Table 35.1 Competition law in selected South-East Asian countries

ASEAN Member Country	Competition Law/ Name of Legislation	Competition Authority	Prohibition of Restrictive activities	Prohibition of abuse of Dominance	Prohibition of anticompetitive mergers	Prohibition of Unfair Practices	Leniency Program	Penalties
Indonesia	Yes/ Law of the Rep. of Indonesia no. 5, 1999 "Prohibition of Monopolistic Practices and Unfair Business Competition"	Yes, Commission for the Supervision of Business Competition	Yes, Chapters III & IV set out the prohibited agreements and activities	Yes, Chapter IV & Chapter V set out the prohibitions on monopolies and abuse of dominance respectively	Yes; Article 23/ Mandatory notification for post merger (i) asset value above 2.5 trillion Rupiah and/ or (ii) sales value above 5 trillion Rupiah. 20 trillion Rupiah combined asset threshold applies to banking sector	No, Separate regulation under the Law on Consumer Protection No 8 of 1999	No,	Administrative directions and fines from 1b to 25b rupiah and criminal sanctions including fines up to 100b Rupiah, or a maximum 6 month jail term
Malaysia	Yes/ Competition Act 2010	Yes, Competition Commission of Malaysia	Yes, Section 4 prohibits anticompetitive agreements	Yes, Section 10 prohibits abuse of dominance	No	No, Separate regulation under the Consumer Protection Act 1999	Yes	Administrative directions/ fines up to 10% of the worldwide turnover of the enterprise for the period of infringement

Philippines	No	Yes, Office for Competition under the Department of Justice	Competition issues are addressed through several different laws that are enforced by respective sector regulators	No	Administrative directions fines and/or jail terms under the respective sectoral legislation
Thailand	Yes/ Trade Competition Act BE. 2542(A.D. 1999)	Yes, Trade Competition Commission	Yes, Section 27 prohibits specific types of anticompetitive agreement	Yes, Section 25 prohibits specific behaviors by dominant operator	Yes, See Section 26/Mandatory notification once thresholds met (Thresholds to be released)
			Yes, Section 29 prohibits acts against fair and free competition	No	Jail term of up to 3 years and or fine of up to 6 m baht and double penalty for repeat offences

Source: Drew & Napier (2012); adapted from and summarizing the main point of Mendoza et al. (2012).

THE STATE OF COMPETITION IN DEVELOPING COUNTRIES

How much competition exists in developing countries? The popular impression is that developing-country markets do not display much competition or rivalrous behaviour. There are numerous government-created barriers to entry and exit from an industry. Besides, there is underdeveloped infrastructure, which makes the markets inefficient. Fortunately there is some hard new empirical evidence which sheds some light on this issue. These relatively new studies use the persistence-of-profitability approach to measure the degree of competition in a market or in an economy as a whole. The basic methodology used in these studies is outlined below.

How should the intensity of competition in a jurisdiction be measured? The current widely accepted approach to such measurement is to introduce the concept of persistence of profitability (PP). The intuition behind this procedure is that if there were competition in the market, firms with high profitability in one period would not have high profitability in a subsequent period. If the competition was intense, there would be no, or very little, serial correlation between profits in one period and profits in subsequent periods. There is now a standard methodology for systematically implementing this intuition. The methodology may be stated as follows:

PP studies, it will be recalled, are based on the following autoregressive equation applied to the time series of profitability of individual firms.

$$\pi_{i,t} = \alpha_i + \lambda_i \pi_{i,t-1} + \mu_{i,t} \quad (35.1)$$

$\pi_{i,t}$ is the profitability of firm i at time t , $i = 1, \dots, m$, $t = 1, \dots, T$. $\mu_{i,t}$ is the usual error term, and α_i and λ_i are the model parameters. λ_i indicates the speed of adjustment; if $\lambda_i < 1$, the long-run (permanent) profitability level of firm i is given by:

$$\pi_{i,p} = \alpha_i / (1 - \lambda_i) \quad (35.2)$$

As is usual in PP studies, to control for business cycles and other macroeconomic shocks, the regression analysis is conducted in terms of the variable $Y_{i,t} = \pi_{i,t} - \pi_t$, where π_t is the average of $\pi_{i,t}$ across firms. The measure $Y_{i,t}$ represents the deviation of firm i 's profitability at time t from the profitability of all other firms in the country at that time. The analysis is based on models of the form:

$$Y_{i,t} = a_i + l_{1i} Y_{i,t-1} + l_{2i} Y_{i,t-2} + e_{it} \quad (35.3)$$

where a_i , l_{1i} and l_{2i} are coefficients and the e_{it} are random errors. The empirical analysis shows that this AR2 model is sufficient to capture the dynamics in all cases in the seven emerging countries examined in this study.

From (35.3), the statistic $Y_{iLR} = \alpha_i / (1 - \lambda_{1i} - \lambda_{2i})$ can be derived to indicate firm i 's long-term profitability relative to the country average. If $l_{2i} = 0$, then the estimate of l_{1i} provides a direct measure of the speed of adjustment of profitability following a shock. Assuming $\lambda_{1i} \hat{I}(0,1)$, adjustment to equilibrium is monotonic. Where l_{2i} is not zero or $\lambda_{1i} \hat{I}(-1, 0)$, adjustment is non-monotonic, and there is no unique way of characterizing its speed based on the estimated parameters (see, further, Goddard and Wilson 1999).

Most of the work on the application of the above model has been done on developed countries. Glen et al. (2000) is the only comprehensive study of competition intensity in developing countries. The authors provide empirical results on the state of competition in seven major markets: Brazil, India, Malaysia, Mexico, Korea, Jordan and Zimbabwe. There are two other papers which also consider developing countries: one is by Kambhampati (1995) with respect to India and the other is by Yurtöglu (2004) with respect to Turkey. The findings of Kambhampati's paper are open to some debate, as these are based on data that cannot reject the unit-root hypothesis in the vast majority of cases using standard methods. This creates difficulties for the statistical and economic interpretation of empirical results in PP studies. Glen et al. (2000) overcome these problems by using the more powerful Im–Pesaran test, which, by exploiting the panel structure of the data, allows us to reject the non-stationarity of profitability. The astonishing substantive result from these studies is that, contrary to conventional wisdom, the intensity of competition in leading emerging markets is certainly no less than that observed in advanced countries.

This model is applied by Glen et al. (2000) to data from seven emerging countries – Brazil, India, Jordan, Korea, Malaysia, Mexico and Zimbabwe – and the results are reported in Table 35.2. Profitability is measured by the return on net assets of the firm. The sample frame is the 100 largest firms quoted on the stock market in each country.

The estimated values of λ_i and the proportion of firms for which Y_{iLR} are either significantly positive or significantly negative at the 5 per cent level for emerging markets are reported in Table 35.2. The exactly corresponding values of these variables for advanced countries, estimated by other researchers, are reported in Table 35.3.

The results indicate that the λ for developing countries is considerably smaller than that for advanced countries. It lies in the region between 0.013 and 0.421. The corresponding results for the value of λ of advanced countries indicate that the value of this parameter lies in the region of 0.500. This suggests, in the normal discourse of the persistence-of-profitability studies that there is greater competition in developing countries than in advanced countries. This empirical conclusion is contrary to most economists' expectations. There are similarly many barriers to entry into these markets; however, Singh (2003c, 2007) points out that there are a number of structural factors in developing countries which are also pro-competition. These include the low quality and

Table 35.2 Persistence of profitability in emerging markets

	Mean λ	Positive Y_{iLR}	Negative Y_{iLR}
Brazil	0.013	0.003	0.418
India	0.229	0.003	0.282
Jordan	0.348	0.050	0.299
Korea	0.323	0.005	0.300
Malaysia	0.349	0.009	0.302
Mexico	0.222	-0.002	0.316
Zimbabwe	0.421	0.157	0.249

Source: Glen et al. (2002).

Table 35.3 Persistence of profitability studies for industrial countries

Author	Country	Sample period	Observations per firm	Number of firms	Sample (λ_1)
Geroski and Jacquemin (1988)	UK	1947–1977	29	51	0.4888
	France	1965–1982	18	55	0.412
	Germany	1961–1981	21	28	0.410
Schwalbach (1991)	Germany	1961–1982	22	299	0.485
Mueller (1990)	US	1950–1972	23	551	0.183
Cubbin and Geroski (1990)	UK	1948–1977	30	243	0.482
Khemani and Shapiro (1990)	Canada	1964–1982	19	129	0.425
Odagiri and Yamawaki (1990)	Japan	1964–1982	19	376	0.465
Schohl (1990)	Germany	1961–1981	21	283	0.509
Waring (1996)*	US	1970–1989	20	12 986	0.540

Notes:

* Estimate based on pooled data for 128 industry groups.

The mean lambda (λ_1) has been estimated by the present authors from the data in Table 3 of Waring (1996).

Source: Goddard and Wilson (1999).

simplicity of products demanded, and contest-based competition whereby subsidies are given only in exchange for the firms meeting performance standards.

There have been some recent advances in the methodology applied to persistency-of-profitability studies, and there are new results. Adelina Gschwandtner (2012) has analysed and compared persistence of profits in three periods for the US economy: 1950–1966, 1967–1983 and 1984–1990. One notable feature of this study is that, whereas the previous scholars have only considered the set of surviving firms, Gschwandtner considers both surviving and non-surviving firms. Her results are totally plausible. She finds that the intensity of competition in the US economy increased systematically over time during the half-century she examined. She found the main determinants of profit persistence to be the firm and industry size, industry growth, risk and advertising.

ECONOMIC THEORY AND COMPETITION POLICY IN EMERGING COUNTRIES

Recent advances in economic theory, particularly agency theory, transaction cost theory and information theory, have greatly enriched our understanding of how competition and competition policy may work in various spheres of an economy and in different economies. Thus, a leading authority on the theory of industrial organization has observed:

Competition is an unambiguously good thing in the first-best world of economists. That world assumes large numbers of participants in all markets, no public goods, no externalities, no information asymmetries, no natural monopolies, complete markets, fully rational economic agents,

a benevolent court system to enforce contracts, and a benevolent government providing lump sum transfers to achieve any desirable redistribution. Because developing countries are so far from this ideal world, it is not always the case that competition should be encouraged in these countries. (Laffont 1998, 237)

This author provides a number of examples to support his contention. All of these involve what economists call the theory of the 'second best'. The latter asserts that, if any one of the assumptions required for the validity of the fundamental theorems of welfare economics cannot be met, restricted rather than unrestricted competition may be a superior strategy. Laffont draws particular attention to the 'demonization' by many economists (including those at the World Bank) of cross-subsidization of different groups by large public utilities. However, he points out that in developing countries, where, in practice, taxes cannot be collected from the wealthy for redistribution, it may be a good strategy for the government to require public utilities in these countries to subsidize poor consumers in the countryside at the expense of richer residents in the city. It may be useful to note here that cross-subsidization is widely used in advanced countries as well.

Laffont suggests that even if competition policy of the kind followed by advanced countries such as the US or the UK were appropriate for poor African countries, they would be a long way from having the institutional capacity to implement such policies. The implementation of a comprehensive competition policy requires a strong state, which many developing countries at low levels of industrialization do not have. Therefore, at the very least, for such countries there will need to be far fewer and simpler competition rules which are capable of being enforced. Clearly it would be unfair, if not absurd, to subject Sierra Leone to the same competition policy disciplines as the US.

I now turn to the consideration of the case of the semi-industrial countries, many of which are now fairly advanced in industrial development, for example, Korea, India, Brazil and Mexico. These countries have reasonably strong states with competent government machinery. However, economic theory suggests that, even for these economies, the US and UK types of competition policies may be inappropriate. A very important reason for this conclusion is that the essential focus of competition policy in advanced countries such as the US is the promotion of allocative efficiency and reduced prices for consumers (WTO 1998). However, from the standpoint of economic development, this perspective is too narrow and static. In order to raise their peoples' standards of living, a central objective of developing countries must necessarily be the promotion of long-term growth of productivity. The pursuit of this objective of dynamic rather than static efficiency requires, among other things, high rates of investment. In a private enterprise economy, this necessitates the encouragement of entrepreneurs' propensity to invest. However, the private sector's animal spirits are likely to be dampened if, as a result of competition, profits become too low, even if only temporarily.

This suggests that unfettered competition may not be appropriate for a developing economy. Economic theory as well as experience indicate that, in the real world of incomplete and missing markets, unfettered competition may lead to price wars and ruinous rivalry and therefore may be inimical to future investment: from this perspective, too much competition can be as harmful as too little. What is required by developing economies is an optimal degree of competition which would entail sufficient rivalry to reduce inefficiency in the corporate use of resources at the microeconomic level, but not so much

competition that it would deter the propensity to invest. This central analytical point is altogether ignored in competition policy discourse in countries such as the US, where the concept of the optimal degree of competition is simply assumed to be maximum competition, that is, the more competition the better.⁴

COMPETITION POLICY IN JAPAN AND KOREA

It is useful in this context to reflect on the operation of competition policy in Japan in the period 1950–1973. The Japanese economy achieved historically unprecedented growth during this time span: its manufacturing production rose at a phenomenal rate of about 13 per cent a year, the gross domestic product (GDP) at 10 per cent a year, and its share in world exports of manufacture rose by a huge 10 percentage points (Singh 1998 [1996]). A central role in this spectacular economic advance was played by the very high rates of savings and investment in the Japanese economy. As noted earlier, the competition policy was subordinated to industrial policy, an essential concern of which was to maintain the private sector's high propensity to invest. For this purpose, the Japanese government's Ministry of International Trade and Industry (MITI) frequently imposed restrictions on product market competition. Amsden and Singh note:

It [MITI] encouraged a variety of cartel arrangements in a wide range of industries – export and import cartels, cartels to combat depression or excessive competition, rationalization cartels, etc. Similarly, believing that large scale enterprises were required for promotion of technical change and for Japanese firms to compete effectively with their western counterparts, MITI encouraged mergers between leading firms in key industries. (Amsden and Singh 1994, 944)

This policy was, arguably, not always correct.

The Korean government broadly followed the Japanese strategy of economic development. It also had a strong industrial policy which, as in the case of Japan, dominated competition policy. The government helped to create the mammoth corporations, the *chaebol*, which went on to capture world markets. Korea was unequivocally an industrially backward country in the 1950s. Its per capita manufacturing output in 1955 was US\$8 compared to US\$7 in India and US\$56 in Mexico. To put it another way, South Korea's per capita income in the mid-1960s was less than \$300. However the economy's future prospects were regarded as dismal. The US Congress passed a resolution to say that South Korea should not be given developmental aid but only humanitarian aid. Yet over the last four decades, Korea has transformed itself into an industrial and technologically sophisticated economy with a per capita income of US \$20 000.⁵

As a result of lax enforcement of competition policy, Korea has one of the highest levels of industrial concentration in the world. However, the giant conglomerates compete with each other fiercely. A significant part of the competition has been of the non-market variety, in which the *chaebol* have competed for government support. The

⁴ See the earlier discussion of the philosophy of US competition policy, which finds virtue in competition itself rather than examining its effects.

⁵ As the source of these statistics, see, among others, Singh (2012).

latter has been given in return for meeting specified performance targets for exports, new product development and technological change. In the marketplace, the *chaebol* competed for market share, as that determined their subsequent investment allocations in a particular industry.⁶ As in Japan between 1950 and 1973, the Korean government until recently has purposefully coordinated industrial investments by competing *chaebol*, so as to prevent overcapacity and too much competition (Chang 1994).

NEW DEVELOPMENTS IN THE THEORY OF INDUSTRIAL ORGANIZATION

The policies adopted by these East Asian countries find endorsement in the new developments in economic theory. Essentially, modern economic theory suggests that dynamic efficiency is best promoted by a combination of cooperation and competition between firms rather than by maximum or unfettered competition (Graham and Richardson 1997).

It has been suggested by some scholars and high-ranking US government officials that the 1997–2000 financial crisis in Asia demonstrates the failure of the state-directed capitalism of the Asian countries. However, a careful analysis of these issues indicates that the crisis was caused not by too much state direction but rather by too little. Overinvestment by the *chaebol* in Korea or the property bubble in Thailand were caused essentially by the fact that these countries were pursuing capital account liberalization in the period immediately before the crisis. Korea had become a member of the Organisation for Economic Co-operation and Development (OECD) in the early 1990s and in fact had abolished its planning agency. Neither industrial overinvestment by the *chaebol* nor excessive investment in the property sector in Thailand would have occurred had the governments coordinated investment activity as before.

In addition to the discussion of the above issues in relation to Laffont and economic theory, another major analysis of this chapter is that competition policy that is appropriate for developing countries and takes into account the ‘development dimension’ cannot and should not be the same as the policy that is implemented in advanced countries such as the US and the European Union economies.⁷

It is also argued strongly here that the kind of competition policy needed in developing countries is not only different from that for advanced countries, but to do justice to the particularities of the development process, a different language is needed. The conduct of the normal current discourse in international fora in terms of the language and the framework of the WTO – market access, national treatment, reciprocity and the most-favoured-nation clause – does not do justice to the economic conditions prevailing in developing countries; indeed, such concepts are arguably prejudicial to developmental needs in this specific context.

It is also suggested here that the new concepts which should be introduced into the

⁶ There was heavy emphasis in the Korean industrialization programme on import controls, which many South Korean companies practiced. Without such protection the particular path of industrialization chosen by South Korea may not have worked.

⁷ Or indeed that was implemented in the same countries in their period of industrialization.

discourse for addressing the developmental dimension are thoroughly grounded in modern economic theory, and there is considerable national and international empirical evidence to support them. However, it must be added that these elements are new only in relation to the current international discourse on the subject. These are widely used in the theory and practice of industrial organization. Indeed some of these are implicit in the WTO agreements themselves; see for example the discussion of the agreement on intellectual property rights.

COMPETITIVENESS AND ECONOMIC DEVELOPMENT

I next take up the question of competitiveness, which was first approached in the Introduction with negative comments from Paul Krugman. The concept of competitiveness, which Krugman dismissed as entirely erroneous when applied to the case of a country, has some analytical virtues which cannot simply be ignored. Krugman is right, of course, in asserting that neither the trade surplus of a country nor its deficit is an indicator of economic efficiency or inefficiency without further information. He also suggests that competitiveness in this sense is of limited relevance to the US economy because international trade was a very small part of it. At the time he was writing it was no more than 2 per cent of GDP. The present figure is about 15 per cent. Krugman is basically using a neoclassical economic model in which there is complete wage-price flexibility, and changes in the terms of trade help to equilibrate the system. In contrast to Krugman, other leading US economists have shown much more sympathy for the competitiveness approach.

Laura Tyson, a former Chairman of the US Committee of Economic Advisors, offered the following definition of competitiveness: she defined it as the 'ability to produce goods and services that meet the test of international competition, while our citizens enjoy a standard of living that is both rising and sustainable' (cited in Krugman 1997, 137). This is a more robust definition of international competitiveness to which Krugman's strictures scarcely apply, if at all. He admits that if trade is a large part of gross national product (GNP), any currency devaluation to maintain trade barriers would in principle have a depressive effect on the rate of growth of real incomes. However, the essential point here is that Krugman is arguing that the standard of living of a country is almost entirely dependent on the rate of growth of domestic productivity and not productivity growth relative to competitors.

The UK provides, for an advanced economy, an apt illustration of its lack of competitiveness in the mid-1970s. Following the first oil price shock of 1973–1974, the UK economy, which was then not a major producer and exporter of oil, suffered an adverse movement in its terms of trade. Howes and Singh (2000) estimate that the size of the shock was about 4 per cent of the GDP. They observed:

Instead of a smooth adjustment of the economy through movements in the exchange rates, there was a protracted process that involved redistributive struggles between various social groups over the diminished national pie. The net result was a doubling of the rate of unemployment, a quadrupling of the rate of inflation, a full-blown financial crisis, and ultimately, the humiliation for an advanced industrial country of being forced to accept an IMF [International Monetary Fund] rescue package, before internal and external equilibria could be restored.

Howes and Singh go on to suggest, 'Thus a relatively small terms-of-trade shock can have serious repercussions for even an advanced economy. The validity of Krugman's analysis of national competitiveness requires an abstraction from such labor market dynamics.' There are other similar considerations which suggest that Krugman has been following basically the wrong track.

Empirical evidence from industrial countries suggests that in countries such as Japan and Germany, their share of the world markets increased between 1963 and 1975, despite the fact that their prices and costs relative to other countries were rising. This paradox was first examined by the late Professor Kaldor and subsequently confirmed over an extended period by Fagerberg (1996, Table 1). The paradox is best explained by the fact that a great deal of international competition takes place in non-price terms rather than in terms of prices. The reason for the positive association between productivity growth and market share is that countries with high rates of productivity growth also have high rates of investment and output growth. Howes and Singh note that such countries thereby achieve faster technical progress, greater learning-by-doing and quicker development of new products. If one considers the history of the last ten to twelve years (since 2004), there cannot be much doubt of the competitive deficit of the US economy. The US has been running a current account deficit which has been of the order of 5 per cent of the GDP at the full employment level of income. These deficits, in turn, have led to global imbalances which certainly increased financial fragility in the world economy, even though these may not have been the main causal factor. Both competition policy and industrial policy have a role to play in this rebalancing of the US economy.

COMPETITION AND COMPETITION POLICY IN THE ECONOMIC HISTORY OF EAST ASIA

Until relatively recently there were serious issues in relation to competition policy and economic history. These controversies arose in their most acute form in relation to the economic history of East Asian countries. The historic assessment of the role of competition and competition policies in these countries as well as their implications for the other countries are critical issues in these debates.

For a long time neoclassical economists (for example, Béla Balassa as late as the 1990s) were claiming that governments had little involvement in the economy in East Asia. Thus Béla Balassa (1988) best summed up the analysis of the neoclassical school as well as that of the Bretton Woods institutions, who were a major contributor to the debate, in the following terms:

The above remarks are not meant to deny the role of government in the economic life of East Asia. But, apart from the promotion of shipbuilding and steel in Korea and a few strategic industries in Taiwan, the principal contribution of government in the Far Eastern NICs [newly industrialized countries] has been to create a modern infrastructure, to provide a stable incentive system, and to ensure that government bureaucracy will help rather than hinder exports.

Similarly, the World Bank's landmark *World Development Report* (1991) (hereafter referred to as the 'Development Challenge') argued that experience shows that the government works best when it follows a market-friendly approach to development. This

report is a seminal document as it represents what the World Bank economists had learnt up to that time from 40 years of development experience. In neoclassical writings the government is portrayed as being a night-watchman state with very little serious involvement in the economy. However, the facts in East Asia are quite different. Singh (2003b) therefore suggests that the relevant issue is to what extent, if any, the Japanese followed the report's prescriptions and a market-friendly approach to development. Did the Japanese government intervene in the markets 'reluctantly'? Did it, for example, leave prices and production priorities to be determined by market forces and simply provide the necessary infrastructure for private enterprise to flourish? How 'transparent' was government intervention in the Japanese industry? To achieve its colossal economic success, how closely did the Japanese economy integrate with the world economy?

The Developmental Challenge does not acknowledge the inescapable fact that there was considerable governmental intervention in the course of post-war Japanese development. The important issue, however, is whether the World Bank Report's characterization of these interventions and the lessons to be drawn from it are valid. Singh (2003b) calls attention to the overwhelming evidence showing that the governments in Japan, the Republic of Korea, and Taiwan, Province of China, did not intervene, reluctantly or transparently, in any of these economies. Specifically, in their periods of fast economic growth, the governments in Japan (1950–1973) and the Republic of Korea used a wide array of interventionist instruments including import controls; control over foreign exchange allocations; provision of subsidized credit – often at negative real interest rates – to favoured firms and industries; control over multinational investment and foreign equity ownership; heavy subsidization and 'coercion' of exports, particularly in the Republic of Korea; a highly active state technology policy; restrictions on domestic competition and government encouragement of a variety of cartel arrangements in the product markets; and promotion of conglomerate enterprises through mergers and other government measures (the Republic of Korea). The governments in these countries intervened not only at the sectoral level, but also far more intrusively at the level of the individual firm through so-called 'administrative guidance'.

Another important issue is how closely the economies of these countries integrated with the world economy. The virtues of openness, international competition and close integration with the world economy are stressed in several World Bank publications (see in particular the Development Challenge). Evidence suggests, however, that these virtues were not in fact practised by either Japan or the Republic of Korea, the two East Asian countries I am concentrating on here.

With respect to the nature and extent of openness practised by the East Asian economies it may be useful to consider the comparative figures on imports of manufacturers into Japan and other industrial countries between 1961 and 1979. The 1979 date is significant because that was more than five years after Japan had signed the OECD agreement of no import controls or tariffs between industrial countries. The data on imports of leading industrial countries between 1961 and 1979 show that as a proportion of GDP, Japanese imports rose by 66 per cent. This compares with a threefold increase in corresponding US imports, more than a tripling of UK imports and a nearly 250 per cent growth in the imports of other European Economic Community (EEC) countries. In 1979, manufactured imports constituted only 2.4 per cent of Japanese GDP; the corresponding proportion in the UK and other countries of the EEC was five to six times

larger. Even in the United States, which traditionally, because of its continental size, has a relatively closed economy, the volume of imported manufacturing goods in the late 1970s was proportionally almost twice as large as in Japan. Clearly, during the 1960s and 1970s (and even more so in the 1950s) the Japanese economy operated under a regime of draconian import controls, whether practised formally or informally.

Thus, despite the acknowledged strong export orientation of the Japanese economy, it was far from being open or closely integrated with the world economy in terms of imports. The imports side of this story does not generally get as much attention as it deserves.

OPTIMAL DEGREE OF OPENNESS AND STRATEGIC INTEGRATION WITH THE WORLD ECONOMY

To sum up, the experience of Japan and the Republic of Korea comprehensively contradicts the central thesis of many World Bank reports that the more open the economy and the closer its integration with the global economy, the faster its rate of growth. During their periods of rapid growth, instead of a deep or unconditional integration with the world economy, these countries evidently sought what might be called strategic integration, that is, they integrated up to the point where it was as much in their interest to do so as to promote national economic growth. If (as stated in the Development Challenge) the purpose of the World Bank economists was to find out why countries such as Japan have been so successful in economic development during the last 40 years, they have clearly been using the wrong paradigm for examining Japanese economic history. The basic problem is that the underlying assumptions of this paradigm are greatly at variance with the real world of static and dynamic economies of scale, learning by doing and imperfect competition. In such a world, even neoclassical analysis now accepts that the optimal degree of openness for a country is not close integration with the global economy through free trade (Krugman 1997; Rodrik 1992). In that case, what is the optimal degree of openness for the economy? This extremely important policy question, however, is not seriously addressed by the orthodox theory.

Chakravarty and Singh (1988) provide an alternative theoretical perspective for considering this issue. To put it briefly, they argue that 'openness' is a multidimensional concept: apart from trade, a country can be open or not so open with respect to financial and capital markets, in relation to technology, science, culture, education, inward and outward migration. Moreover, a country can choose to be open in some directions (say trade) but not so open in others, such as foreign direct investment or financial markets. Their analysis suggests that there is no unique optimum form or degree of openness which holds true for all countries at all times. A number of factors affect the desirable nature of openness: the world configuration, the past history of the economy and its state of development, among others. The timing and sequence of opening is also critical. Chakravarty and Singh point out that there may be serious irreversible losses if the wrong kind of openness is attempted or the timing and sequence are incorrect. The East Asian experience of strategic rather than close integration with the world economy is fully comprehensible within this kind of theoretical framework.

MULTILATERAL COMPETITION POLICY: THE MAIN ISSUES BETWEEN THE NORTH AND THE SOUTH

The basic idea of multilateral competition policy is that all member countries of the WTO become subject to the same competition policy disciplines. The South does not approve of this idea, for the simple reason that WTO disciplines contain the Dispute Settlement Mechanism (DSM), which can lead to cross-sanctions for the offending parties: the winning party can enforce sanctions against the offender in a totally different area than where the offence occurred. It is for similar but opposite reasons that the North approves of a multinational competition policy. It would like a strongly enforced competition agreement which will be binding on all countries.

The North had originally put forward a Multilateral Agreement on Investment (MAI) from 1995 to 1998. The agreement was drafted and proposed by the OECD. Under the terms of this agreement, basically any country could invest anywhere, produce anything without let or hindrance from any government. The MAI was draconian with respect to developing countries. Instead of a level playing field, this kind of arrangement would have resulted in developing countries being even more handicapped than before. Developed-country firms are far more capable than those from developing countries, and thus in free competition the latter would have been annihilated. In the event, strong opposition to this idea came not from only developing countries but also from countries like France. The MAI was finally withdrawn, and in its place a much milder multilateral agreement was subsequently proposed by advanced countries through the European Community.

This proposal was much more modest and intended to meet the criticism of developing countries in relation to MAI. The European Commission's (EC) proposed multilateral agreement on competition policies comprised the following main elements:

1. All member countries should declare hard-core cartels to be illegal. Countries should cooperate in implementing such a ban. Other than this ban on hard-core cartels, countries can have any provisions they like in their competition laws.
2. However, these domestic competition laws should be in conformity with the core WTO principles of 'most-favoured nation' (MFN), non-discrimination, national treatment, transparency and procedural fairness.
3. Since the proposal is for a multilateral agreement under the WTO, it is therefore subject to the organization's dispute settlement mechanism. In response to objections from both rich and poor countries, the EC further agreed to limit the scope of the application of WTO's Dispute Settlement Understanding (DSU) in the manner specified below:
 - a. Thus the proposals stress that 'WTO dispute settlement would be strictly limited – as is also currently the case under the DSU – to complaints brought forward by WTO members. Private individuals and firms would have no standing therefore' (EC 2003, 2).
 - b. The proposals suggest: 'we also agree with this view, and strongly believe that dispute settlement should be strictly limited to assessing the overall conformity of the actual law, regulations and guidelines of general applications against the core principles contained in a WTO agreement, including a ban on hard core cartels' (ibid.).

- c. In addition the proposals indicate that the DSU would recognize the 'specific circumstances of developing country members' (ibid.) in considering a dispute.
- d. The proposals also contain an informal peer review in relation to compliance and issues of confidentiality. Thus, according to the proposals:

Unlike dispute settlement which would apply to the obligations contained in the WTO competition agreement [see above], peer review would aim at a wider range of competition law and policy matters. As a WTO competition agreement would merely set out a limited number of binding obligations, WTO members would remain at liberty to decide for themselves whether or not to include additional substantive areas in their domestic competition law, including e.g. abuse of dominance. Given the distinct nature of peer review, it would be natural and indeed appropriate for such a process to address the entirety of a domestic competition law framework. (Ibid.)

This kind of peer review would complement the provisions of the DSU. In addition, the proposals envisage that:

a consultation and a co-operation mechanism would be a key component of any WTO competition agreement. A range of issues could be raised under the consultation provisions of such an agreement, including one WTO member's assessment – rightly or wrongly – that the domestic legislation of another WTO member does not meet the standards contained in the WTO agreement, in particular as regards the core principles of transparency, non-discrimination and procedural fairness. (Ibid.)

On the face of it these EC proposals would seem to be entirely reasonable ones which nobody should be able to object to. The claim is that the proposed multilateral competition policy for the whole world involves only a minimum set of rules on which all right-minded people everywhere would agree. It is recognized that many developing countries, nevertheless, will not have the capacity to implement competition laws, and so assistance with capacity-building is an important part of the EC proposals.

At this point it may be useful to introduce explicitly into this discussion the concept of special and differential treatment⁸ for developing countries, whose guiding principle, it may be recalled, is non-reciprocity. Specifically, it is proposed that advanced-country governments should legislate for anti-competitive conduct that is illegal within their jurisdictions to be illegal also when carried out by these firms in any developing country; further, that citizens and corporations in developing countries that are harmed by these illegal practices be enabled to sue for damages in the courts of advanced countries and that there be a fund to facilitate such legal action. The principle behind this recommendation is the same as that established regarding corruption.

Returning finally to the multilateral aspect of the EC's competition policy under the aegis of the WTO, there are important arguments from the perspective of the organization itself against such an arrangement. Competition policy is a complex undertaking, which is certainly required today as a disciplinary measure on large multinational companies in a globalized world. This is an enormous challenge that cannot be undertaken by an institution that is already overloaded. Apart from anything else, there are good organizational reasons for the WTO to remain sharply focused and to use its accumulated

⁸ See further Singh (2003c).

capabilities to their best advantage. Moreover, it is not just a matter of cartel conduct that needs to be regulated but also other kinds of market conduct that reduce the ease of entry into international markets due to the anti-competitive conduct of dominant firms. For example, if private harmful cartels are banned, theory and evidence suggest that these will often be replaced by full-scale mergers between the previously cartelized and often convicted firms. Levenstein et al. (2003) provide recent evidence on this matter.

In considering these competition proposals it is also important to emphasize the fact that the links between competition policy and international trade are no more significant than, say, tax policy and international trade, infrastructure deficiencies and international trade, or education and international trade. As the Strategic Structural Initiative Talks between the US and Japan showed, there were more than 100 ways in which trade between these countries was arguably being distorted. It would therefore be best for the WTO to confine itself to its core competences strictly regarding trade matters, rather than to overextend through mission creep to an endless string of trade-related matters. This would not only be in the interests of developing countries but also benefit the world at large.

Last but not least, developing countries face more difficult problems from a whole gamut of bilateral treaties significantly involving the US and a wide range of poor and not so poor developing countries. These treaties are usually one-sided, giving the United States much more leverage than it would get in a multilateral negotiated agreement. The speed at which the US is proceeding on these bilateral treaties provides little room for comfort for developing countries. They have no option but to oppose these anti-development treaties as best they can under the present economic and political arrangements for the world economy.

CONCLUSION

The main argument of this chapter is that the multilateral competition policy proposed by the EU is suitable neither from the perspective of developing countries nor from that of the world economy as a whole. As far as developing countries are concerned, the policy goes too far in instituting homogenization of competition policy and thus deprives them of important developmental instruments. On the other hand, from an international perspective, the proposed policy is too feeble to deal with the challenges posed by large multinational corporations intent on monopolizing world markets.

To deal with this, what is required is greater policy autonomy for developing countries and at the same time a more stringent framework for dealing with mammoth multinational companies and their endless appetite for overseas expansion, often through mergers and takeovers. The EC's proposals both on competition policy and on foreign direct investment seem more concerned with providing transnational corporations with additional tools to give them unfettered access to developing countries, and undermine the latter's ability to control the economy and foster their own domestic companies and national economic development.

What are the policy implications of this wide-ranging analysis of competition and competition policy issues? The main policy implication is that the time has come for the establishment of a development-oriented 'International Competition Authority'

(ICA) to control anti-competitive conduct and, particularly, growth by mergers of large multinationals.

The characteristics and responsibilities of this authority would include the following:

1. It would be charged with maintaining fair competition in the world economy and keeping the markets contestable by ensuring that the barriers to entry for late industrialists are kept at low levels.
2. Analogous to the social welfare objectives of the European Commission, the proposed international authority would be asked to pay attention to the special needs of the developing countries, to competitive opportunities for small and medium-sized firms, to facilitating the transfer of technology to developing countries and to ensuring fair distribution of wealth.
3. It would have the authority to scrutinize mega-mergers and to deter the mega-firms from abusing their dominant position.
4. Again on the European Commission model, the international competition authority would be concerned mainly with cross-border or international aspects of the workings of competition. Below the authority, at a national level, the member countries would have their own national competition policies.
5. For good administrative and practical reasons, references to the competition authority would only be permissible in case of anti-competitive behaviour by corporations above a certain size. The size criterion would normally keep most large developing-country corporations outside the direct purview of the competition authority. In view of the large size of many Third World corporations, particularly in infrastructure, not every corporation from developing countries can be provided with special safeguards. The developing-country negotiators would have to be nimble and willing to take part in the give-and-take of international negotiations. Developing countries are better off if they maintain solidarity and take a long-term view. This may eventually persuade developed countries to also adopt the long-term path of global solidarity. The global economy needs cooperation, not just between Southern countries, but also between the North and the South. These negotiations on the competition policy are a small part of the very large global project of goodwill and solidarity which would benefit all nations. In relation to the international merger movement, the authority would attempt to limit growth by merger by large multinationals under its purview. They would be allowed to merge, provided they divest themselves of a subsidiary of equal value. This would mean that multinationals would not be able to grow by mergers, but they could expand through organic growth or greenfield investment. It would also not stop them from taking over other firms subject to divestiture as outlined.
6. As argued in detail in Singh (2002), the main merits of this proposal may be summed up as follows. A large body of research on mergers indicates that mega-mergers have the potential of increasing market dominance and reducing contestability. Discouraging such mergers would therefore enhance global contestability, global competition and global economic efficiency, while at the same time being distributionally more equitable.
7. The governance of the ICA would have proper representation of developing countries and would not be dominated by developed countries. The following comment

from one of the editors of this book is perfectly fair when they ask how this 'proper representation' for the ICA is to be achieved. The only method available to developing countries is to rely on knowledge and to seek support from progressive people in rich countries. If one looks at this issue historically, developing countries, in relative terms, would seem to have done very well over time in a number of negotiations; see, for example, the difference between the Uruguay Round, where the developing countries did very badly, and the current Doha Round, where these countries are doing much better. Having learnt from the previous experiences, persuading developed countries that their basic interest should be the same as that of developing countries would not be an easy gospel to preach. This, however, seems to be the only way forward to meet the challenges of fast-growing population, global warming and other extremely difficult problems which the world economy faces.

Although international cooperation on competition policy would be of particular benefit to developing countries, it also has useful features to assist the large multinational corporations. The international competition authority would, for example, be able to provide multinationals under its purview with unambiguous decisions on mergers and other competition-related matters. Instead of being subject to the often conflicting decisions of many different jurisdictions (for example, the United States, the European Community, Japan and, over time, countries such as India and China), the international competition authority's rulings would prevail over all national and regional jurisdictions.

There is no illusion that an international agreement of the above kind would immediately be acceptable to advanced countries. Nevertheless, it indicates the nature of economic arrangements in this area which would best serve the developmental needs of poor countries. It may be helpful, however, to proceed to the establishment of the ICA in stages. At the first stage, the authority may have no coercive powers but simply be able to monitor and to report on abuses of dominant market positions, on mergers and the authority's other competition objectives.⁹ Such monitoring would itself be beneficial to developing countries as it would provide them with information on cartels and on market power abuses of multinationals. Developing countries would find it difficult to acquire such information otherwise. With the experience gained from this kind of limited international cooperation, nations can, over time, work towards greater cooperation by giving the ICA the necessary powers to enforce its rules.

The above line of reasoning has been subject to penetrating criticism by the editors of this book. This is mainly on the ground that there are serious concerns from developing countries' point of view about all such international authorities, that however good the intentions, they end up being unfair simply because of the reality of global power. How would this concern be addressed directly? Would it not be safer to avoid such a global authority and instead suggest common approaches by a set of developing countries towards the multinational corporations?

The editors' point is well taken, but unfortunately there are few levers of power available to developing countries. They have to do the best they can with the limited instruments at

⁹ Scherer (1994) makes a similar point in relation to his proposal for an international agreement on competition policy.

their disposal. Solidarity between developing countries is certainly one area which these countries will need to explore thoroughly. Instead of abandoning from the outset any prospects for a compromise, it would be better to consider such possibilities as part of a global solution. There is no presumption in this context that developed countries will not do what is in their best interests. They will need to be persuaded that the kind of proposal suggested here will ultimately be in their interests. For such proposals to work, the world's developing countries would certainly have to embrace South–South cooperation. Indeed, they may also have to cultivate North–South cooperation to make it easier for developed countries to participate in such projects which would be of common benefit to humanity.

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36. Knowledge governance: intellectual property management for development and the public interest

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INTRODUCTION

The field of knowledge is the common property of mankind. (Thomas Jefferson)

The core point of this chapter is the hypothesis that in the field of intellectual property rights and regulations, the last three decades witnessed a big change. The boundaries of private (or corporate) interests have been hyper-expanded while the public domain has significantly contracted. The chapter aims to show that this is detrimental to innovation diffusion and productivity growth (see Brown-Keyder 2007; Boyle 2008; Rodrik 2011; Burlamaqui and Cimoli 2014 for similar lines of reasoning). It develops the argument analytically, fleshes it out with some empirical evidence and provides a few policy recommendations on how to redesign the frontiers between public and private spaces in order to produce a more democratic and development-oriented institutional landscape. The proposed analytical perspective developed here, ‘knowledge governance’, proposes a framework within which, in the field of knowledge creation and diffusion, the dividing line between private interests and the public domain ought to be redrawn. The chapter’s key goal is to provide reasoning for a set of rules, regulatory redesign and institutional coordination that would favor the commitment to distribute (disseminate) over the right to exclude. In 2005, Mark Blaug made a prescient remark on that matter:

It never occurred to anyone before, say the 1980s, that such disparate phenomena as patents for mechanical inventions, industrial products and processes (now extended to biotechnology, algorithms and even business methods), copyrights for the expression of literary and artistic expressions in fixed form and trademarks and trade names for distinctive services, could be generalized under the heading of property rights, all conferred by the legal system in relation to discrete items of information resulting from some sort of appropriate intellectual activity. (Blaug 2005, 71–72)

For the purposes of the argument I develop in this chapter, there are two crucial elements implicit in Blaug’s statement. First, that, as recently as in the 1970s, the balance between private interests and the public domain was completely different from what it has

* This chapter is based on recent papers published by the author (Burlamaqui 2009a; Burlamaqui and Cimoli 2014). I would like to thank Fred Block, Yochai Benkler, Rainer Kattel and Richard Nelson for suggestions concerning both form and content for a previous version of this chapter.

become today. Second, that what became codified, and largely accepted, as intellectual property (IP) rights was, then, understood as a set of rules and regulations issued by the state, granting temporary monopolies to corporations in very specific cases. Recent history seems to back both Blaug's statement and my hypothesis. Until the 1970s, United States patents were seen as monopolies (a term with distinctly negative connotations at that time), not rights. In fact, in some areas of economic activity, it would have been possible to say that upholding the validity of IP was the exception rather than the rule (Brown-Keyder 2007, 159). This was reflected in IP law as well as in competition or anti-trust law. In copyrights, the term under United States law was 28 years.

The early 1970s witnessed several dramatic changes. In 1974, a trade Act allowed the Federal Trade Commission to bring sanctions directly against countries whose products were seen to hurt United States interests. In 1975, copyrights were expanded to more than 70 years from the death of the author, and for corporate owners, to 95 and sometimes even 120 years (Brown-Keyder 2007, 158; Boyle 2008, Ch. 1). In 1979, Section 301 of the United States trade law was amended to 'allow private parties to take significant and public steps to enforce international trade agreements' (Brown-Keyder 2007, 160). In 1988, the Justice Department rescinded guidelines for antitrust prohibitions on certain kinds of licensing clauses. This removed IP licensing from antitrust scrutiny. Finally, with the enactment of the World Trade Organization (WTO) in 1995, the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement quickly became the linchpin of United States trade strategy. By then, private corporations had vastly expanded their enforcement power and global outreach, while the public domain had significantly contracted.

From a knowledge governance perspective, the critical question that should be asked here is: when does extended protection cease to work for generating Schumpeterian profits and become a base for rent-seeking and rent extraction?¹ There is no good theoretical answer to this, but recent data on declining research and development (R&D) expenditures correlating with the maintenance of handsome profits in big pharma seems to emphasize its relevance (see 'Supply Running Low', *Financial Times* 10 February 2011). As an alternative to the mainstream approach, new insights and evidence are beginning to appear. Besides the already cited studies, a few papers and books are laying the ground for a very different way to understand the complex interactions among knowledge production, appropriation and diffusion. Examples include Jerome Reichmann's recent papers; the comparative and interdisciplinary research led by Richard Nelson, Akira Goto and Hiro Odagiri on intellectual property and catching-up; and the collection of essays by Fred Block and Mathew Keller on the role of the US government in technology development.

However, notwithstanding the valuable contributions by this emerging body of research, the main analytical question remains largely untouched: how should government-issued intellectual property rules and regulations interact with competition policies,² publicly funded R&D and other forms of technology policy in order to help craft and govern socially inclusive development strategies? It appears that there is no coherent ana-

¹ See Arnold Plant's point below on this matter.

² A much less catchy label but one that reveals their real nature much better than 'rights'.

lytical framework to address that interaction.³ However, these links are central to any meaningful discussion of dynamic competition, knowledge accumulation and sustainable development in a global context today.⁴

This chapter aims to contribute to answering that question. It first lays the ground rules by linking knowledge production and dynamic competition with intellectual property issues from the perspective of the dynamic efficiencies and inefficiencies that are bound to appear. It will become clear that the existence of dynamic inefficiencies opens up a considerable space for knowledge governance. The next section further develops the previous framework by linking market features, competition and technology policies with intellectual property. Special attention is given to how competition policies should address intellectual property issues under a knowledge governance framework, as well as to the institutional design of public agencies dealing with knowledge production, appropriation and diffusion issues. The chapter concludes by suggesting some broader theoretical and policy implications of that approach.

KNOWLEDGE PRODUCTION, DYNAMIC INEFFICIENCIES AND THE ROLE OF KNOWLEDGE GOVERNANCE

In the context of Schumpeterian competition, intellectual property rules and regulations – patents, trade secrets, confidentiality contracts, copyrights, trademarks and registered brand names – became powerful, strategic weapons for generating sustained competitive advantages and, especially, Ricardian rents (see Schumpeter 1997 [1934]; Plant 1934).⁵

From an entrepreneurial perspective, patents and other intellectual property rights (IPRs) are extremely effective means to reduce uncertainties and therefore can contribute to igniting the animal spirits and long-term expectations through building temporary monopolies around products, processes, market niches and, eventually, whole markets (Nelson 1996; Burlamaqui and Proença 2003). However, the word ‘temporary’ is crucial here because of creative destruction; as Schumpeter (1994 [1942], 102) stated long ago, ‘a monopoly position is in general no cushion to sleep on’.⁶

The Chicago law and economics framework claims that in the absence of robust legal protection for an invention, the inventor either will have less incentive to innovate or will

³ This does not imply a shortage of work discussing specific issues in what is called ‘the economics of intellectual property rights’. See Menell (1999) for an excellent survey on general theories of IP. A very interesting review acknowledging the under-researched nature of the theme can be found in Dixon and Greenlough (2002). The shortcomings of most of that work are, from my perspective, the result of its concentration on data, measures and testing, with little attention paid to the theoretical framework within which they are conducted.

⁴ From an evolutionary perspective, evolution should not be confused with progress (a very common mistake); but as a process, it should definitively be understood as entailing increasing complexity.

⁵ Having said that, it is striking how little has been written about the crucial and complex connection between Schumpeterian competition and IPRs. And, of course, I include myself in that loophole. In that regard, legal theorists such as Landes and Posner and Benkler are clearly ahead, in the sense that they are already doing the reverse: using Schumpeterian concepts and insights to deal with IPRs (see Landes and Posner 2003; Benkler 2006).

⁶ However, a strong IP regime is precisely the kind of ‘institutional innovation’ that can help to build that cushion. Addressing this problem is one of the core issues of the knowledge governance approach.

try to keep his invention secret, thus reducing, in either case, the stock of knowledge to society as a whole (Landes and Posner 2003, 294). From that perspective, patent law itself supposedly internalizes the goal of promoting the diffusion of innovation.⁷ It requires, as a condition of granting a patent, that the patent application disclose the steps constituting the invention in sufficient detail to enable readers of the application, if knowledgeable about the relevant technology, to manufacture the patented product themselves. Of course, anyone who wishes to replicate a patented product or process legally will have to negotiate a license with the patentee (Jolly and Philpott 2004, pt. 1; Landes and Posner 2003, 294–295).

Moreover, any reader of the patent application will be free to ‘invent around’ it, to achieve the technological benefits of the patent by other means without infringing on the patent. Translated to evolutionary economics jargon, the requirement of public disclosure creates a situation of ‘incomplete appropriability’ for the patent holder. That links directly to Schumpeter’s insight on the temporary nature of monopolies: incomplete appropriability allows for the possibility of technological inventiveness and borrowing from publicized information, both of which foster creative destruction processes that are the main challengers of established monopolistic positions. Thus, if carefully used, intellectual property rules can be sources of dynamic efficiencies that can help to ignite the Schumpeterian positive-sum game represented by falling costs, falling prices, positive margins (achieved through market power) and increased consumer welfare.⁸

Those are the basics, but the picture gets much more complicated as one examines the details. When we dive into the depths of the relationship between innovation and IP laws and regulations, considerable space opens up for dynamic inefficiencies to emerge and, therefore, for the introduction of governance considerations and for the emergence of a knowledge governance approach. Consider the following six points.

First, as Sir Arnold Plant, an almost forgotten analyst in the field, observed in the early 1930s:

In the case of physical property, the institution of private property makes for the preservation of scarce goods . . . In contrast, property rights in patents and copyrights make possible the creation of scarcity of the products appropriated . . . the beneficiary is made the owner of the entire supply of a product for which there may be no easily obtainable substitute. (Plant 1934, 65–67)

In sum, intellectual property regulations can easily give rise to dynamic inefficiencies such as cumulative monopoly power to extract rents from a given consumer base, notwithstanding the fact that they can at the same time create the conditions for the expansion of productivity and wealth and the generation of Schumpeterian profits.⁹ That in itself leaves ground for knowledge-governance-oriented initiatives to enter the scene,¹⁰ as will be seen below.

⁷ Reference here is to US patent law.

⁸ Hereafter, I will label this ‘Schumpeterian positive-sum game’ as the ‘Schumpeterian package’.

⁹ Or, in a more technical way of saying it, the expected (negative) impact on future incentives for competitors to compete (innovate) and future consumer welfare (see Anthony 2000, section IV).

¹⁰ On policy prescriptions, institutional building, institutional coordination and regulatory redesign.

Second, the broader – and stronger – the IPRs, generally the less the patentee's competitors will be able to benefit from the patent by 'inventing around', or innovating on the shoulders of, the patent (or copyright) holder. Broad IPRs are thus bound to exacerbate the dynamic inefficiencies that Plant and others have observed. Accordingly, especially given the complexity and diversity of patents and other IPRs, a one-size-fits-all prescription seems ill-advised. From an analytical point of view, the articulation between competition policies and IPRs is a much-needed development,¹¹ especially if the former's goal is innovation diffusion and delivering the Schumpeterian package, not innovators' protection per se.

Third is the practice of strategic patenting, that is, the proliferating business strategy of applying for patents that the company has no intention of using or exploiting, solely to prevent others from profiting from the innovation (see Varian et al. 2004, pt. 2; Landes and Posner 2003, Ch. 11). Obviously, this is a major source of dynamic inefficiency. It has the effect of shifting resources from true innovative activity to litigation (or from labs to courts). It drastically increases the costs of patent prosecution and litigation and, therefore, of innovation. Such strategic patenting constitutes a paradigmatic example of what Baumol has called 'unproductive entrepreneurship'. Baumol notes:

[a] variety of roles among which the entrepreneur's efforts can be reallocated . . . and some of those roles do not follow the constructive and innovative script conventionally attributed to that person. Indeed, at times the entrepreneur may even lead a parasitical existence that is actually damaging to the economy. (see Baumol 1993, Ch. 2, 25; see also Ch. 4)

Evidently, this task of 'reallocation of entrepreneurship' (from unproductive roles to productive ones) is a knowledge governance matter and one that goes far beyond the common notions associated with industrial policy.

Fourth, IPRs have a central role in the 'digitally renewed economy', as Paul David would label it (see David in Brynjolfsson and Kahin 2002, 85). In so-called 'new-economy industries', intellectual property, rather than the products and processes in and of themselves, is a firm's primary output or asset. Overlapping innovations, rapidly falling average total costs, zero marginal costs, strong network externalities and, therefore, fierce 'standards battles' and path-dependence are the hallmarks of new-economy industries (Shapiro and Varian 1999; Best 2001; De Long 2000). These industry structure characteristics might be seen as generating speeding waves of creative destruction and, thus, potentially more (not less) fiercely competitive challenges to incumbents. Although there is an element of truth in that picture, creative destruction in a world of increasing returns to scale, fast learning and 'winner-takes-all' markets does not mean anything close to some idealized form of 'perfect competition' or perfectly contestable markets. Rather, it merely brings the replacement of one, or a few, dominant firms by others, such as the replacement of Fairchild by Intel, of Ciba and Geigy by Pfizer and Novartis, of Wang and Compaq by Dell and HP, of IBM by Microsoft and Lenovo, and of Microsoft by Google and Apple.

¹¹ I will use the term 'competition policies' rather than 'antitrust' here because of the outdated connotation of the latter. I will not discuss 'trust-busting', but a much more subtle and complex set of behaviors, institutions and policy tools.

In other words, in the new economy, firms' abilities to combine first-mover advantages with trade secrets, patents, copyrights, brand loyalties and network externalities may afford them secure long-lasting monopolistic positions despite their low rate of (radical) innovations, and not because of it.¹² The outcome is, once more, the danger of replacing Schumpeterian profits with rent extraction, and Schumpeterian competition with zero-sum game exclusionary practices. From the perspective of delivering the 'Schumpeterian package', there is an obvious role for knowledge governance here in restoring the balance between private interests and the public domain (see Boyle 2008, Chs 8–10). However, the normative policy framework within which it should take place is far from certain. I will revisit it in the next section.

Fifth, if we understand knowledge production as a cumulative, and increasingly globalized,¹³ process in which cutting-edge knowledge and know-how rest on previous innovations, and if we conceive of patents and IPRs, in general, as fences erected to protect those previous innovations, we get a very different outcome. It is not difficult to perceive, depending on the institutional design within which IPRs are handled, the tension and potential trade-off between private interests and the conception of knowledge as a global public good. This is the so-called argument of the 'second enclosure movement' or 'information feudalism', which is now the subject of intense debate (see Drahos and Braithwaite 2002; Boyle 2003, 2008; Evans 2005; *Technology Review* 2005). According to Evans (discussing Boyle's ideas):

There are really two halves to the second enclosure movement. The defensive side focuses on intensifying the enforcement of protected monopoly rights to exclude others from using information that has been defined as private property. The offensive side of the agenda involves taking information that has been considered part of 'nature', or the common, cultural and informational heritage of humankind, and transforming it into 'private property'. If both halves are successful, the 'second-enclosure movement' would constitute a global re-distribution of property comparable to the eradication of the commons that ushered in agrarian capitalism in Western Europe 300 years ago. (Evans 2005, 2)

Once more, we encounter strong forces of global dynamic inefficiencies, presenting an opportunity for knowledge-governance-oriented policies to step in.

Sixth, to the question, 'Where do knowledge and innovations come from in the developed nations?', a very large part of the answer would include: publicly funded R&D, government contracting to buy things from the private sector that do not exist, and using the WTO to help open up markets for those innovations abroad (Block 2008; Weiss 2008, 2009). In the case of the United States, armed with an annual procurement budget of US\$450 billion – more than \$1 trillion if states are included – the state plays a crucial role

¹² See Landes and Posner's (2003, 395–396) somewhat reluctant recognition of that point. The case of Microsoft itself can be used to illustrate the point. The lack of breakthroughs – technological innovations or radical quality or price improvements – is notoriously known in Microsoft. It is well known that the Windows model was copied from Apple's user interface – which itself was a second-hand theft from Xerox PARC – and that there was a tremendous lack of perception, by the company, of the Internet potential until the success of Netscape became obvious. It is also known that the differences between the versions of Windows and Office that I am using right now, although 'new', display very pale improvements in relation to their 1998 predecessors.

¹³ In the sense of its increasingly geographical dispersion, but not denoting any sign of broader inclusion or democratic orientation.

in governing the way knowledge and innovations prosper in the United States (Ruttan 2006; Weiss 2009). Furthermore, according to some recent studies, the United States government played a decisive part in the development of virtually all general-purpose technology, from interchangeable parts and mass production to the Defense Advanced Research Projects Agency (DARPA) and biotech (see Ruttan 2006; Weiss 2007; Block 2008; Block and Keller 2011).¹⁴

Let me rephrase this point: if we conceive R&D as ‘turning money into knowledge’ and innovation as ‘turning knowledge into money’, why should governments (that is, public money) heavily subsidize the former and almost completely retreat from participating in the latter?

Last, the institutional structure – or institutional design – within which the knowledge production appropriation and diffusion apparatus is enforced is central for understanding its performance. I refer here not to the rules, as such, but to their legal enforcement apparatuses, the state structures by which they are supported and the sort of public bureaucracies available to administer the R&D and IP systems. Jaffe and Lerner’s (2002) thoughtful and provocative work on the recent changes in the United States patent system provides the background for my discussion, which will draw on the relationship between the institutional design of the United States patent system and the problems it creates for the promotion of innovation and ‘productive entrepreneurship’.

All six issues discussed above illustrate how the interaction between Schumpeterian competition and hyperextended intellectual property rules and regulations can give rise to dynamic inefficiencies that risk the delivery of the ‘Schumpeterian package’ and call for knowledge governance interventions to restore the balance between private interests and the public good (or public interest).

KNOWLEDGE GOVERNANCE: BRINGING THE PUBLIC DOMAIN BACK IN

Knowledge governance (KG) is a broad concept embracing different forms of governance mechanisms influencing the production, appropriability and dissemination of knowledge. The ‘knowledge governance approach’ is characterized as an emerging approach that cuts across the fields of knowledge management, innovation and competition policies, and economic governance. KG deals with how the deployment of governance mechanisms influences knowledge processes, such as sharing, retaining and creating knowledge:

As an analytical perspective, it encompasses intellectual property rules and regulations but supersedes it, drawing on those aforementioned fields and disciplines in order to identify the contours of the new knowledge ecology. KG’s main goal is to design, support and implement public interest oriented governance mechanisms, organizational and business models which are alternatives to the instituted intellectual property regime we now have. (Burlamaqui 2009b)

¹⁴ DARPA is the central research organization of the United States Department of Defense. Its most radical innovation was the Internet (known first as ARPANET).

Within the knowledge governance approach, the general rule should be the promotion of innovation and the assurance of its widest diffusion. This implies, simultaneously, promoting and regulating entrepreneurial success. Promoting and regulating are crucial links here. Together, they address both the private (profit-seeking) and the public (innovation diffusion and technological upgrading) sides of competition policies and their respective institutional designs.

This policy and institutional design package was, in fact, the core of the Asian state-centered developmental strategy. Nowadays, it remains alive and well in East Asia. In Singapore, it is evident in the country's twin government-sponsored initiatives, on biomedical sciences and on 'work restructuring', where market-shaping and institutional coordination are the core elements (Pereira 2008). In China, it is clearly present in the 12th five-year plan for 2011 to 2015, completed in April 2015. The plan highlighted the importance of the 'magic seven' industries: (1) energy saving and environmental protection; (2) next-generation information technology; (3) biotechnology; (4) high-end manufacturing; (5) new energy; (6) new materials; and (7) clean-energy vehicles. The plan's objective was to 'shape' them in order to raise their share from 3 percent to 15 percent of the economy by 2020. None of those countries label their government-sponsored initiatives as knowledge governance, but it is quite clear that this is what they really are: going much beyond industrial policy or intellectual property, they reach the key interactions between knowledge and markets, and shape them from a public policy, public interest perspective.

From a normative perspective, knowledge governance policies should use market-shaping devices in order to design policies to manage creative destruction processes. These policies would seek to shape markets in order to reduce dynamic inefficiencies and increase dynamic efficiencies coming from Schumpeterian competition, a form of competition that, now, overuses intellectual property rules as one of its core weapons. From the perspective of firms, knowledge governance policies should not be about preventing market power but about curbing its excesses: 'unproductive entrepreneurship' and rent extraction.

Within a knowledge-governance framework, the main policy concerns should be to mitigate structural inefficiencies and to increase access. Plant argued that patents can make the beneficiary 'the owner of the entire supply of a product for which there may be no easily obtainable substitute' (Plant 1934, 30), a troubling claim. A clever, but not radical, innovation (for instance, market-niche dominance by Post It® notes from 3M) should not raise major concerns among policy-makers dealing with competition issues. However, what if a proprietary general-purpose technology happens to corner the market (for instance, a new genetic engineering research tool or a particular DNA sequence)? Then Plant's point would hold completely, and the granting of a patent would create a substantial monopoly for the owner, and potentially prevent others from exploiting it, thus slowing the diffusion of an innovation.

Those examples highlight the importance of the market-shaping approach. In cases like those involving general-purpose technologies, IP rules and regulations should be much more rigorously examined and carefully constructed. A possible tool for dealing with that would be for the government to claim a 'golden share' in the IPR system (especially patents and copyrights), by which it would be able to convert a property

right previously granted into a general public license¹⁵ should the owner refuse, after establishing their first-mover advantage,¹⁶ to behave cooperatively and to license broadly and fairly.

In sum, radical innovations – and, especially, general-purpose technologies – should be subjected to a special IPR regime in which the government's golden share should be able, if needed, to shape the market toward a more competitive institutional design (away from too secure – or broad – monopolies).¹⁷ A legitimate, and fair, reason to do so is that, as already mentioned above, according to some recent studies the US government played a decisive part in the development of virtually all general-purpose technology, from interchangeable parts and mass production to DARPA and biotech (see Ruttan 2006; Weiss 2007; Block 2008).

Given both the complexity and diversity of knowledge-production regimes and R&D funding, a one-size-fits-all prescription for knowledge appropriation (IPR rules) is not the best way to handle the matter. The 20-year length of a patent (or the terms of copyrights and registrations) is not a 'scientifically established outcome' (Landes and Posner 2003). It is, rather, a convention; that is, a (lobby-based) institutional-legal construct that, as such, can very well be questioned and changed.¹⁸ Alternatively, consider this broad guideline for knowledge governance policies: the length and breadth of patent protection, as well as innovations protected by copyrights, such as software, should be directly linked to the expenditures on R&D made by applicants in the development of a technology, and inversely correlated with their market power.¹⁹ Thus, big research budgets (in terms relative to the firm's size) would, in principle, qualify better than 'historical accidents' to earn legitimate protection. Conversely, global players would enjoy less legal protection than 'garage outfits', given that the same legal contract would grant cumula-

¹⁵ That is, a legally enforced temporary monopoly.

¹⁶ Meaning the ability to recover their costs, establish a robust competitive advantage and enjoy a sizable profit stream, but not the ability to exclude others from using and inventing around their innovation or protecting its diffusion. Taking as an example the Microsoft case, the battle should not be about 'breaking' the company. The golden share would allow the government to force Microsoft to publish its source code. An open code would quickly get cleaned up and improved, consumers would benefit, and new entrants would probably arise, helping to ignite the innovation race and dislodging Microsoft from its monopoly position while preserving the company's market power and ability to innovate.

¹⁷ The reader, at this point, may be asking, 'How can an innovation – or innovation cluster – be defined as radical before it "matures" though a process that evidently takes time?' The answer is simple: it cannot. The proposal here is for public sources of funding and regulatory bodies, through the golden share or via special provisions similar to those behind the rationale for issuing compulsory licenses, to retain the option to classify an innovation cluster as a strategic general-purpose technology for potentially delivering massive wealth creation. As such, those technologies would be treated similarly to weapons of mass destruction, but for inverse reasons. And that placement would happen *ex post*, not *ex ante*.

¹⁸ As a matter of fact, a century ago, US copyrights lasted for 14 years, and could be extended another 14 if the copyright holder petitioned for an extension. Today, corporate copyrights last for 95 years, and individuals retain copyrights for 70 years after their deaths. There was nothing 'scientific' to back these changes, but rather the powerful lobby of the entertainment industry. As for patents, the reader should bear in mind that both in Switzerland (between 1850 and 1907) and in the Netherlands (between 1868 and 1912), industrialization occurred without enforcement of patent laws (see Schiff 1971).

¹⁹ R&D expenses as a percentage of the applicant's sales or assets could become a metric. That would require a close monitoring of R&D evolution within firms. Assuming that those R&D-intensive industries are also the ones bearing more fixed and sunk costs, plus near-future planned expenses tied to the birth of an innovation or technology, should be in the contract granting the rights and their actual production of the enabling mechanism to conclude the exam. Otherwise, patent pending would be a sort of 'reasonable doubt' proviso.

tive and increasing returns in the former case – reinforcing dominance – and, often, the ability to serve debt in the latter. Instead of one size fitting all, we would have something like – paraphrasing Rodrik – ‘many recipes under the same rule’.²⁰

As for the source of dynamic inefficiencies referred to above as strategic patenting, it should be dealt with in the same way as David Ricardo suggested landlords should be addressed:²¹ earned but unused patents should be classified like fertile but uncultivated pieces of land in an environment structurally constrained by scarcity. They should be taxed, and progressively so. After an initial ‘launching period’, each year of idleness in the commercialization of the patent should give rise to a severe fine, the exact amount of which should be left to specialists in the field but could very well be an increasing percentage of the patentee’s sales or assets. Does this sound rigorous? Yes, it does, but patents and IPRs are legally conceded monopolies and matters of public interest.²² They are too important to be left to markets to govern and lawyers to design.²³

Additionally, the kind of approach to the governance of knowledge I am pointing to should have as its core principle the discouragement of the sort of unproductive entrepreneurship that Baumol has been talking about for more than two decades: a type of legal entrepreneurship that turns law firms into very big and profitable corporations, but with zero impact on the economy’s real productivity. It would, in sum, help to trigger the ‘relocation of entrepreneurship’ – from courts back to labs – as claimed by Baumol (1993, 2002).

Another key point outlined above relates to the relationship between the ‘digitally renewed economy’ and intellectual property issues, and particularly to the risk of winner-takes-all market outcomes (see Varian et al. 2004; Carlton and Gertner 2002). Knowledge governance policies here should pursue, very aggressively if needed, public enforcement of standards development, cooperative-standards setting, the stimulation of (instead of restriction on) joint research ventures and other forms of research coordination, and venture capital financing to multiple sources of experimentation (Block and Keller 2011). The aim should be a ‘less kind, less gentle patent system’, as Jaffe and Lerner (2002) put it, in which patents are much harder to acquire and easier to share.

²⁰ A very difficult emerging theme here is the protection to be given to traditional knowledge: DOC (Denominazione de Origine Controllata certifications that grant monopolies based on regional know-how and capabilities, like champagne versus sparkling wines) issues and related others. I acknowledge its importance but do not deal with it in this chapter.

²¹ The parallel here would be between the example given by David Ricardo of the unique fertility of a piece of privately owned land, which would generate increasing revenues to its owner, regardless of efforts to improve the land’s productivity, and the stream of revenue generated from a patent regardless of whether its owner keeps innovating.

²² In that sense, they are very similar to the financial industry and especially to the banking sector.

²³ Google offers a striking example on that matter: in 2011 it bid US\$900 million for the patent portfolio of Nortel Networks,² the Canadian telecom equipment maker, as part of a strategy to defend itself against patent litigation. The amount of money involved signals how fierce the patent wars have become, particularly in Silicon Valley, where even the largest and most powerful companies, like Google, are besieged by dozens of patent-infringement suits. It also underscores Google’s frustration with the state of the patent reform legislation in Congress.

Though Google could potentially use some of the technology in the Nortel patents in future research, the company said it wanted to buy them to defend itself against patent litigation. By building a large portfolio of patents, Google keeps them out of competitors’ hands. It also hopes to dissuade other companies from suing it, either because Google holds similar patents to the ones they might sue over, or as deterrence: ‘if you sue me, I will sue you’ (*New York Times*, 5 April 2011).

Also of concern is the recent wave of IPR expansion and its connection to a potential 'information feudalism' or 'second enclosure movement'. This movement is analyzed by progressive IP lawyers, software programmers and a sizable number of social and natural scientists of various extractions as a recipe for global monopoly, one that is likely to stifle innovation at the same time as it concentrates wealth (see Moglen 2003; Benkler 2003; Burlamaqui and Cimini 2014). A number of commentators have called for an alternative to this second enclosure, an alternative they term 'the new commons'.²⁴ As Evans (2005, 3) has aptly put it, this alternative is 'attractive both because of its distributional implications and because of its potential for raising the rate of innovation and value creation'. From a knowledge-governance perspective, the basis of the new commons comes from a redefinition of ownership: from a focus on the right to exclude, to a focus on the commitment to distribute (disseminate).

The key idea here is that once property rights are redefined along the lines pioneered by the open source software movement, a much more egalitarian redistribution of intangible assets and a more powerful rationale to foster innovations will be able to emerge. This rationale is one that unfolds from the characteristics of the networked information economy: an economy of information, knowledge and culture that flows over a ubiquitous, decentralized network.

In that environment, as Benkler remarks, productivity and growth can be sustained in a pattern that differs fundamentally from the industrial information economy of the twentieth century, in terms of two crucial characteristics. First, non-market production can play a much more important role than it could in the physical economy. Individuals working alongside firms can make a real difference in the creation of innovative solutions and productivity gains (Benkler 2003, 1; 2006).²⁵ Second, radically decentralized production and distribution, whether market-based or not, can similarly play a much more important role by increasing the diversity of ways of organizing production and consumption and, therefore, by increasing the sources and possibilities for multiple forms of experimentation.

This is clearly a global issue and – because of its global scope, and also because of the undertheorized relationship between innovation, competition policies and intellectual property rights – a very difficult one to handle. It will certainly require the active involvement of governments in encouraging and assisting the development of open-source systems to move society toward more general public licenses-oriented IPR regimes. It will also require international cooperation; both very turbulent matters from a power politics perspective. Nevertheless, the recent decisions by IBM and Nokia, for example, to put part of their patents into the public domain suggests that there is perhaps more room to maneuver than the skeptical analyst might expect.

²⁴ A 'common' is a piece of land over which people can exercise certain traditional rights in common, such as allowing their livestock to graze upon it. Modern usage is to refer to particular 'rights of common' and to reserve 'the common' for the land over which the rights are exercised, while the term 'the commons' has come to be applied to other resources that a community has rights or access to.

²⁵ And, he adds, one can clearly observe this behavior by noticing that most of what we do on the Internet runs on software produced by tens of thousands of volunteers, working together in a way that is fundamentally more closely related to a community than to a hierarchical big corporation standing alone.

CONCLUSION

The knowledge governance-oriented policy institutions framework I have proposed should be flexible and pragmatic and should have creative destruction management and maximum expansion of access to knowledge as its main goals. In its innovation and competition policies dimension, it should not be anti-consolidation but anti-unproductive entrepreneurship (Baumol 1993, 2002); pro-efficiency but not libertarian (in the Chicago School sense of letting the market, almost always, take care of its own problems); and, especially, pro-cooperation, leaving room for business networks to thrive and for state-sponsored administrative guidance initiatives. It should also engineer policies toward the development of multiple sources of experimentation and allow room for industrial and technology policies without jeopardizing its own core theoretical foundations.

In its intellectual property dimension, it should not point to a one-size-fits-all institutional design and should not pursue the maximum protection of monopolistic rents as both the United States Patent and Trademark Office (USPTO) and the WTO seem to be doing. It should, rather, search for the minimal common denominator, allowing for institutional and technological diversity and for distinctive developmental strategies (Boyle 2004, 2008; Rodrik 2011). It should take into account the asymmetries in the distance to the 'development frontier' among countries and regions, echoing Joseph Stiglitz's recent, and wise, remark that 'Intellectual property is certainly important, but the appropriate IPR system for an emerging country is different than the IPR system best fitting already developed nations' (Stiglitz 2005).²⁶

From an evolutionary policy perspective, the key issue to deal with is how to separate innovation-rooted profits, which should be rewarded but understood as windfalls (dependent on continuous innovation), from legal monopoly-granted rents, which should be eliminated or, at least, closely monitored and curtailed.

None of these policy prescriptions will be achieved without a huge dose of strategic state action; and most of them will require a high degree of international institutional redesign. This is an uneasy task; nonetheless, the expected result, to which this chapter intends to make a small contribution, would be a theory and policy framework linking, conceptually, market features to innovation, and Schumpeterian competition and competition policies to intellectual property rights management, which will allow room for catching-up initiatives and for the (re)construction of development strategies.

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²⁶ One of the main reasons for that, although certainly not the only one, is that the big pharmaceutical companies perform obscene price discrimination among nations (see Varian et al. 2004, 52) and almost always refuse to engage in poor and emerging countries' public policies oriented toward health care.

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37. Legal structures and economic development: towards an ideal economic analysis of a legal problem¹

Jürgen G. Backhaus

INTRODUCTION

Legal structures are important in order to facilitate economic development, and legal constructions such as property rights and bankruptcy are obvious examples of key legal institutions on which our present economic system rests. In the countries with a cameralist tradition economic development has been the underlying purpose of teaching and researching economics for a long time. In the countries with a mercantilist tradition the emphasis was different. Here the control of the economy was the main purpose. For this reason, the subdiscipline of law and economics became stronger in countries influenced by cameralism. Here – where development was the main purpose of state economic policy – the underlying economic logic of a legal institution became a primary concern.

Scholars who dealt with the relationship between law and economics, such as Jeremy Bentham or Julius von Gierke, favoured systems of codification, as codification can be made with future purposes in mind while the alternative system of common law (case law) necessarily reflects purposes of the past.

Economic development, therefore, was clearly on the mind of Jeremy Bentham, who produced and offered for sale state constitutions (sometimes with success), and Julius von Gierke, whose commentary on the German Civil Law of 1896, which took force on 1 January 1900, provided an interpretation which made this Civil Law serve the founders' boom of the new century, the administered war economy, the trying times of hyperinflation, the controlled economy of the national socialists, the planned war economy, the moneyless economy of 1945 through 1948, the post-war boom economy in West Germany and the introduction of state socialism in the East, all with the same flexible Civil Law. This case shows how legal structures can facilitate economic development for better or worse.

Economic analyses are needed for a variety of different applications. Their format will therefore differ according to the application for which they are needed. This chapter presents a 'how-to' guide, a survey of the most important applications is offered, followed by a discussion of the steps necessary for an economic analysis of a legal problem at a professionally acceptable level.

¹ This chapter is originally from Backhaus, J.G. (2005) but with additions to the Introduction, last paragraph and References.

THREE TYPES OF ANALYSIS

In principle there are three different kinds of analysis: an evaluative analysis, a positive analysis of legal structures (economic reconstruction of legal argument), and a normative (welfare) economic analysis. These three types differ in the economic method and approach to the problem. An evaluative analysis tries to analyse, on the basis of an economic model, the consequences of a particular legal decision or set of decisions, or else an act. A positive analysis aiming at reconstructing the structure of a legal argument or doctrine aims at illuminating complex legal reasoning that cannot be reduced to one or a few organizing principles of legal doctrine. Hence a legal theory is replaced by an economic theory. While these first two types of analysis differ in their level of abstraction, they both belong to the realm of positive (and therefore not normative) analysis. This implies that the analytical conclusions are in principle testable and therefore need to be presented in a testable form. Although it will not always be possible to run empirical tests for all the relevant conclusions of an economic analysis, an appropriate test procedure and the relevant data sources should be indicated in conjunction with a statement indicating which test results would refute the analytical conclusion.

A normative (welfare) economic analysis is different. Its purpose is to distil normative conclusions from a limited set of value judgements. Since legal reasoning is based on value judgements, the task of the economist is to explore the relationship between the various value judgements under-lying legal discourse and to indicate where and how they may conflict. If, for example, a particular value judgement is to be given precedence over others, the normative economic analysis can show to what extent this priority will compromise attainment of other traditional goals. In this case, the economist tries to give expression to lawyers' values to their fullest possible extent.

Since this exercise is actually a sophisticated tool of good lawyering and thus by necessity decision oriented and normative, it does not lead to testable applications. Whether the analysis is correct or not can still be ascertained by testing its logic.

DIFFERENT APPLICATIONS

The first distinction concerns the economic method or approach. A second distinction refers to the different uses of legal economic analysis. Economic analyses of legal problems are used in vastly different contexts. In court cases, economic experts have traditionally played a role when specifically economic expertise (such as the likely effects of mergers) was required. With the expansion of law and economics as a subdiscipline to virtually every aspect of legal applications, the economist's role has likewise become a broader one. The scope of a legal economic analysis of a court expert will depend on whether the expertise is required for elucidating the particulars of a single case or whether an assessment of the likely consequences of setting precedent is called for. In the first case, the application of received economic knowledge and exercise of standard techniques is normally sufficient, whereas in the second case a model may have to be developed (and tested).

A legal economic analysis plays an important part in administrative applications as well. Again there is a substantial distinction between the analysis of the application of a specific rule to a particular case or whether the impact of the rule on all the cases to which

it is applied has to be analysed. Again, in the second case, an explicit model will have to be constructed. The most genuine applications of an economic analysis to legal problems occur at the legislative level. Since at this level we will normally observe a competition between different proposals, the task of the economist is to sort out which aspects of the differences between them are economically relevant. It is hoped that a single model of relevance can be developed that encompasses the competing proposals. The broader the impact of the legislation under consideration, the more thorough hypothesis testing will be required.

GENERAL GUIDELINES

Apart from the differences between these various types of analytical approaches, to be discussed shortly, there are six recommendations which should be heeded in any event.

1. The purposes of a particular decision or rule need be strictly differentiated from the outcomes of that decision or rule. A frequent misunderstanding grows out of the assumption that the two coincide, and it is often the task of the economist to show how and why they do not.
2. The economic analysis must be kept pure, in the sense that no additional assumptions not contained in the model must enter. In particular, the theoretical model must be kept separate from the empirical base.
3. The economic analysis of a particular legal rule or decision must not be kept to the confines of that rule; very often, there are consequences going beyond the area to which the rule or decision was meant to apply. These wider consequences may actually be more important than the narrower and intended ones. It is the task of the economic analyst to render as complete a picture as possible.
4. At every step the analysis should be kept empirically open in the sense that empirical knowledge that is or might be available can be systematically introduced.
5. Legal rules and decisions have to be analysed in terms of whose decision making they are able to affect. Economics is a science about decisions taken by agents, and the consequences of legal decision making are the composites of those decisions with respect to rule making. The legal economic analysis can only be institutionally relevant if the deciding actors have been correctly identified.
6. Finally, the economic analyst, in presenting his/her results, needs to keep in mind how much and what information his/her lawyer counterparts are able to digest and work with. A careful process of translating and simplifying without falsifying may be necessary.

PRELIMINARY STEPS

- Step 1 Define the problem to be analysed and state what types of answers can be expected.
- Step 2 Disassemble the problem and reduce it to a sequence of legal questions with as small a residue as possible (see step 4).

- Step 3 Make every legal problem correspond to an appropriate set of legal norms and indicate the norms.
- Step 4 Now structure the residue:
 - (a) list all the questions of fact and indicate the most appropriate method for establishing these facts;
 - (b) list all the questions of theory, state the questions precisely in terms of and in conjunction with the appropriate theory or theories to be invoked.

ANALYTICAL STEPS

- Step 1 State the basic problem in economic terms, develop one unifying model of the model in several variations until it fits the problem at hand. State the possible outcomes of your model-based analysis.
- Step 2 Select and list the norms and legal terms the interpretation of which will be critical to the outcome of the analysis and give an economic analysis of each in turn. You must precisely state the theory which you use for this analysis and ensure that the premises remain the same as in the general model of reference.
- Step 3 List the solutions (of step 2) and translate them into the language of the legal norms. Draw the conclusions.
- Step 4 Now carry through the analysis as a whole by using the model developed in step 1 and the interpretative results from step 3. State the outcome.

MODEL VARIATIONS AND SENSITIVITY ANALYSIS

The four analytical steps may have to be repeated for the main alternatives under consideration.

- Step 1 Try to incorporate the main variations of the conclusions (analytical step) into the same model and discuss the outcomes.
- Step 2 Highlight the critical assumptions on which the solution depends.
- Step 3 Ascertain whether the model is robust with respect to those assumptions and, if it is not, indicate precisely where the model applies.
- Step 4 Give a survey of the most important competing models not used in this analysis and indicate the reasons for your preference. If that preference is only slight, you may have to repeat the analysis in terms of the second-best model.
- Step 5 Translate the results of your analysis and the main steps by which it came about into legal terms.

SPECIFIC OBSERVATIONS

Some observations apply specifically to the different approaches and uses, as displayed in Table 38.1.

Table 38.1 *Different approaches to law and economics*

Evaluative	Positive	Normative	Analysis applications
1	[2]	[3]	[Courts]
4	5	6	Administrative
7	8	9	Legislative

1. Most of the analysis needed in court situations is straightforward applications of economic techniques. Here, reliance on empirical data is particularly called for. Since the expert is brought in to help determine the case one way or the other, he/she should expect to be confronted by a counter-expert. Critical assumptions of the economic analysis are eagerly picked up by lawyers, particularly in adversarial procedures. This tends to confuse all parties involved, including the judges. Therefore one has to be careful to avoid jargon and to state assumptions and conclusions in clear terms. The model itself should be kept basic.
2. When trying to reconstruct involved court decisions in terms of positive economic theory – this is the art Judge Posner has developed to the point of mastery – it is important to trace the roots of the conflicting aspects of court decisions. The conflicting outcomes may result from any one of the following causes:
 - a. faulty reasoning (unlikely in high court decisions, but see Tullock, 1993),
 - b. implicit factual assumptions that have to be brought to the surface and proved correct or incorrect,
 - c. incorrect use of non-legal terms,
 - d. incorrect generalizations from non-legal theories,
 - e. uncertainty of the courts about the likely outcomes of their decisions,
 - f. conflicting intentions of traditional decision making.

For the economic analyst it is important to pinpoint one or several of these problems and focus on their resolution. The results of the economic analysis will be welcome to the court decision makers as long as they clearly improve upon their lawyering. The judicial intentions have to be clearly formulated and need to enter the analysis. Much of the opposition to the economic analysis of legal problems such as Posner's stems not so much from an aversion to economic analytical techniques as from a sense that the economic analysis is a Trojan horse carrying ideological value judgments not shared by the court.

3. Welfare economic analyses often revolve around highly technical questions that can have important consequences. An example is the proper choice of a discount rate in compensation cases. The economic analyst should be aware of these arguments and state them explicitly in his/her brief, while not relying excessively on dubious assumptions (see previous section).
4. In administrative decisions, typically, more time is allowed to prepare an higher. This will refer in particular to the empirical corroboration of the analysis. The administrative agency may actually be helpful and assist in data gathering and processing.
5. When attempting to reconstruct in economic terms a whole set of legal norms such as an administrative decree or an act, the analyst should determine what shaped the

act and its current interpretation and implementation. It is unrealistic to assume that an economic analysis can bring about a change in either the act itself or its interpretation or its implementation if that change runs counter to the intentions of powerful pressure groups. It is not the task of the economist to change the political balance. The economist has to take the political status quo as given and try to improve upon it in the Pareto sense. Hence a political economic analysis of the legal norms under consideration is likely to be necessary. This does not mean that the economic analyst should skirt the difficult 'political' or distributive issues. It is quite appropriate and sometimes welcome to elucidate distributive consequences of alternative decisions in conjunction with the emphasis on allocation. Only where one alternative is clearly superior to the other in the Pareto sense should the economic analyst make this judgement, and explicitly so.

6. In some administrative procedures, explicit normative economic analyses are called for. When, for example, environmental impact statements are required, the analytical techniques used should be clearly described. Confusion about those techniques can lead to a perversion of their results.
7. There is no doubt that the economic analyst can play a role of the greatest importance in the legislative arena. Economics is most useful when applied to a large number of similar cases, and this is the case when a piece of legislation is to be enacted. Since most legislation is controversial, the economic analyst should try to stay outside the political turbulences while being aware of the different pressures involved. Nothing hurts the standing of an economic analyst more than being involved in a heated discussion with another economic analyst *in public*. Questions of economic methodology cannot always be resolved. They can never be resolved in the political arena. In order to be successful, it is important to stress the areas of agreement among economists and state, but not controversially discuss, the points of disagreement. In an evaluative analysis of this kind, heavy reliance on empirical techniques with large data bases is particularly useful. The economic analyst who is also politically involved should state clearly where the analysis ends and the political persuasions begin.
8. When analysing legislative proposals or laws that have to be passed or may have to be amended, the economic analyst should keep in mind that the impact of a law begins much earlier than the date at which it gets passed. The more important the legislation is, the more forceful will be the reactions to it before its enactment. The economic analyst should therefore try to construct a model which takes into account the likely reactions of those affected by the law, and spell out the consequences of alternative proposals in these terms. Far-reaching legislative proposals often have consequences even if they are not enacted. In order to avoid such unintended consequences, it is wise and makes economic sense to provide for loopholes and clauses making it possible to opt out of the provisions of the law. Often the distributive consequences of particular pieces of legislation foster so much opposition that a well-thought-out and balanced piece of legislation cannot be passed. In that case, a long transition period and an effective date pushed far into the future can prove to be an attractive solution. (See Frey, 1983, p. 29.)
9. In the legislative process, the economic analyst can play an important and helpful role by spelling out the implications of different political persuasions. In this way,

deadlocked committees can sometimes be got moving again. In order to make welfare economic analyses useful for these applications, it is important to translate them into plain everyday language.

10. A short guide to the literature is in order here. An overview is given in Backhaus (2005), *The Elgar Companion to Law and Economics*. A legal economic analysis which follows roughly the approach outlined above can be found in Backhaus (1987), a book which gives a legal-economic analysis of one court case. The classical works in law and economics are Calabresi (1970), which he followed up with Calabresi and Bobbitt (1978), and Posner's *Economic Analysis of Law* (1986). An alternative, institutionalist approach can be found in Samuels and Schmid (1981). Texts commonly used at United States universities include Polinsky (1983) and Shavell (1987). The text by Ogus and Veljanovski (1984) offers a collection of relevant readings; and widely used, although somewhat opaque, is Veljanovski (1982). Most texts de-emphasize procedural law, but Tullock (1980) is a notable exception. His book is particularly accessible to the non-economist. An excellent case study is Reuter (1983), which has since appeared in a student edition. While most of the literature is in English, the German literature is also extensive, most of it being quoted in Adams (1985) and Backhaus (1987). The most important journals in the field are the *European Journal of Law and Economics*, the *International Review of Law and Economics*, the *Journal of Law and Economics*, the *Journal of Law, Economics, and Organization* and the *Journal of Legal Studies*.

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38. Deindustrialization and premature deindustrialization

*Fiona Tregenna**

INTRODUCTION

Classical development economics, especially structuralist approaches, regard the manufacturing sector as having special properties as an engine of economic growth. From this perspective, industrialization is the key route for developing economies to catch up with developed economies. These theoretical and policy approaches rose to prominence in the 1950s and 1960s, for instance in the approach advanced by the Economic Commission for Latin American and the Caribbean (ECLAC).

At that time, industry was growing in most developed as well as developing economies. However, this has since been reversed, with de-industrialization setting in initially in advanced economies and subsequently in many middle-income and even lower-income economies as well. De-industrialization is intensifying over time, setting in at lower levels of income per capita, as well as at lower shares of manufacturing in countries' employment and gross domestic product (GDP), than earlier.

While de-industrialization always refers to some sort of problems or decline in manufacturing, there are alternative definitions of it. In an early study of de-industrialization, Bluestone and Harrison (1982, 6) define it as 'systematic disinvestment in a nation's core manufacturing industries'. Singh (1977) conceptualizes de-industrialization in terms of an 'efficient' manufacturing sector, which he defines as manufacturing being able to export enough to meet a country's import requirements at acceptable levels of employment, output and exchange rate. De-industrialization is usually defined as a fall in the share of manufacturing in total employment (see, e.g., Rowthorn and Ramaswamy 1997; Saeger 1997; Alderson 1999; Rowthorn and Coutts 2004; Dasgupta and Singh 2006; Palma 2005, 2008). Tregenna (2009, 2013) argues that de-industrialization should be defined in terms of a sustained decline in both the share of manufacturing in total employment and the share of manufacturing in GDP. This is based, firstly, on an argument that manufacturing may act as an engine of growth through both output and employment channels; and, secondly, on an empirical analysis suggesting that not all cases where the employment share of manufacturing falls should appropriately be classified as de-industrialization.¹

This chapter begins with an empirical overview of trends in the share of manufacturing in GDP and employment, across countries and over time. This is followed by a critical review of some central issues emerging from the literature on de-industrialization: causes

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¹ See Tregenna (2016) for a discussion of alternative definitions of de-industrialization and a typology of different types of de-industrialization in the light of the heterogeneity of de-industrialization internationally.

of de-industrialization; the relationship between de-industrialization and technological retrogression; premature de-industrialization; and whether de-industrialization matters for economic growth.

EMPIRICAL OVERVIEW OF DE-INDUSTRIALIZATION TRENDS

This descriptive overview of international trends in de-industrialization analyses the shares of manufacturing in employment and GDP for various country groupings over time. Figures 38.1–38.4 show the share of manufacturing in countries' total employment and GDP between 1970 and 2010. In Figures 38.1 and 38.2 countries are grouped by income. Countries are divided into four quartiles based on their income per capita in each year, with Quartile 1 the lowest and Quartile 4 the highest. For instance, Quartile 1 in 1970 includes the quartile of countries with the lowest income per capita in that year, which differs from the set of countries in Quartile 1 in 1980.² In Figures 38.3 and 38.4 countries are grouped by region. Figures 38.1 and 38.3 show the share of manufacturing in total employment, and Figures 38.2 and 38.4 show the same for the share of GDP.

The first striking observation is the manifest failure to industrialize among poor countries. In Quartile 1, the share of manufacturing in employment does not reach 5 per cent in any period (see Figure 38.1), and the share of manufacturing in GDP barely surpasses 10 per cent at its peak in 1990 (see Figure 38.2). For both employment and GDP, even the peaks for Quartile 1 are far lower than the lowest points for any other quartile. The share of manufacturing in GDP in Quartile 1 countries actually declines after 1990, without even reaching 11 per cent of GDP (see Figure 38.2).

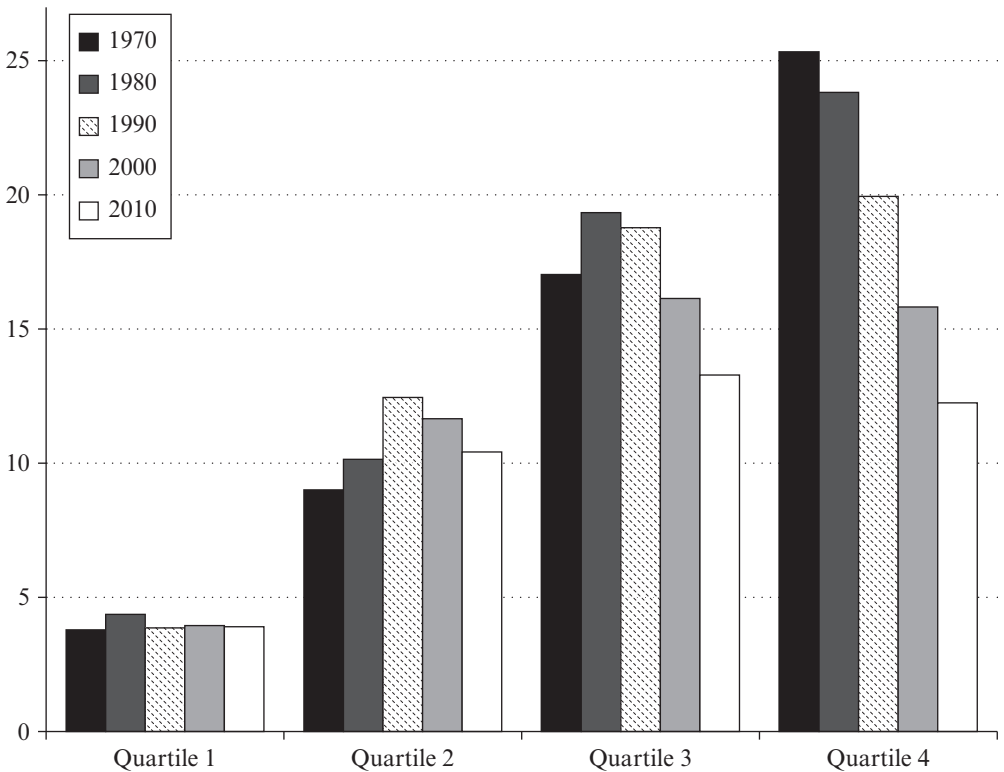
This can mainly be accounted for by the complete failure to industrialize in most of sub-Saharan Africa, given the preponderance of sub-Saharan African countries in the low-income grouping. As shown in Figures 38.3 and 38.4, even the peak share of manufacturing in both employment and GDP in sub-Saharan Africa is lower than the lowest points for any other region. If anything, by 2010 sub-Saharan Africa has actually begun to deindustrialize from the very low earlier 'peaks'.³

De-industrialization in these countries has set in before they even industrialized in any real sense. This de-industrialization is not just premature, but one can perhaps introduce a term of 'pre-industrialization de-industrialization' to characterize such cases. While 'pre-industrialization de-industrialization' may sound contradictory or paradoxical, it is intended to characterize situations where countries begin to de-industrialize at a point where the shares of manufacturing in employment and GDP are still very low, that is, before they have even really industrialized.

This problem can be elucidated with some country examples. In Liberia, the share of

² Note that in the World Bank's classification of low-, middle- and upper-income countries, countries are recategorized annually based on countries' income per capita for that year, but this classification only goes back to 1987.

³ The share of manufacturing in GDP in Quartile 1 countries in particular, and especially in African countries, may be 'artificially' depressed in the recent decade by the commodity price boom, which inflated the share of primary products in GDP. Even so, there seems to be a downward trend in the share of manufacturing in these economies.



Note: Income measured in income per capita. Quartile 1 is countries in the lowest quartile for a given year; Quartile 4 is countries in the highest quartile for a given year.

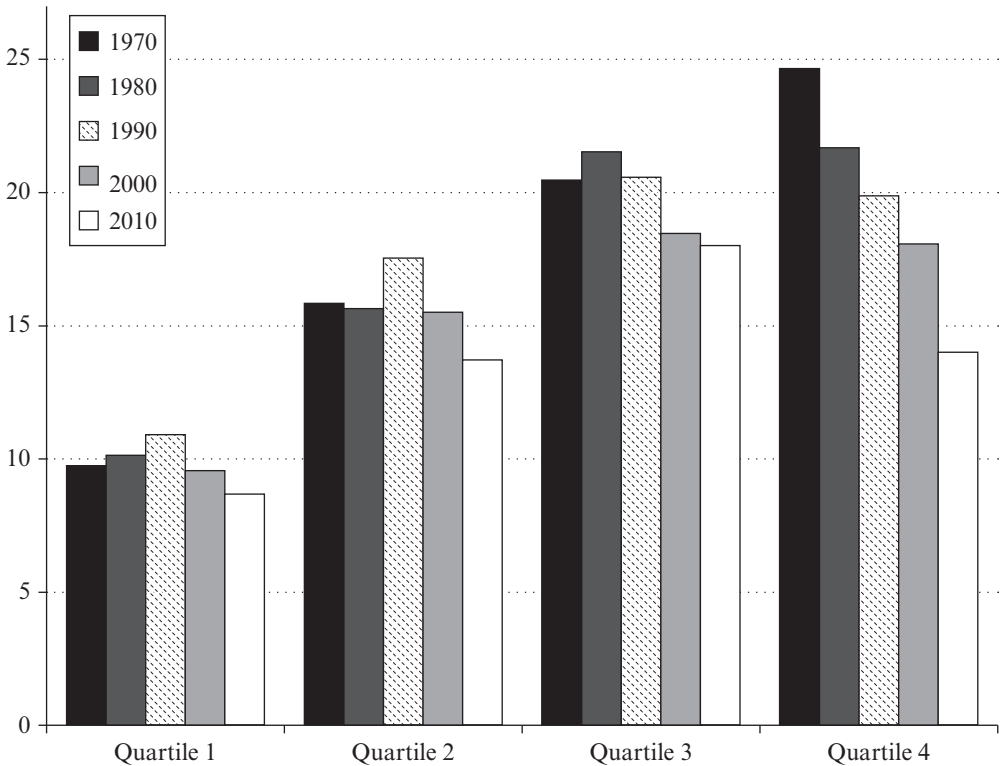
Sources: Employment data from ILO, income data from Penn World Tables.

Figure 38.1 Share of manufacturing in total employment, countries by income group, 1970–2010

manufacturing in total employment fell from 3 per cent in 1970 to 0.3 per cent in 2010, and the share of manufacturing in GDP fell from 11 per cent in 1990 to 6 per cent in 2010. In Mozambique, manufacturing constituted 4 per cent of employment and 24 per cent of GDP in 1990, falling to 1.5 per cent and 14 per cent, respectively, by 2010. Similar evidence of ‘pre-industrialization de-industrialization’ can be seen in countries such as Sierra Leone, Malawi, Kenya, Madagascar, Guinea, Tanzania and Sudan.⁴ Even allowing for poor data quality and possible data discontinuities over time, it is a bleak picture, and the trends are probably genuine in at least some sub-Saharan countries.

In contrast to sub-Saharan Africa, in South Asia manufacturing is still growing as a share of total employment (and stable as a share of GDP), though from a low base. This

⁴ Employment data sourced from the International Labour Organization (ILO), income data from Penn World Tables.



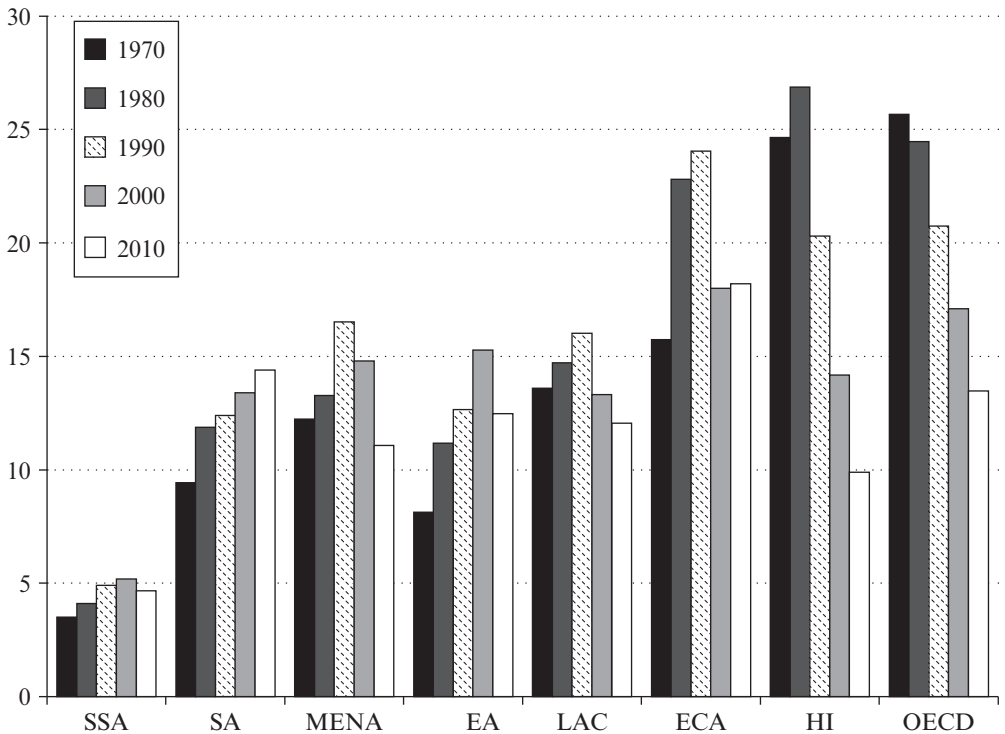
Note: Income measured in income per capita. Quartile 1 is countries in the lowest quartile for a given year; Quartile 4 is countries in the highest quartile for a given year.

Sources: Value added data from UN, income data from Penn World Tables.

Figure 38.2 Share of manufacturing in GDP, countries by income group, 1970–2010

is with income per capita being higher in South Asia than in sub-Saharan Africa. The most dramatic drop evident here, across all country groupings, is the enormous fall in the share of manufacturing in GDP in Europe and Central Asia (ECA) between 1990 and 2000. Note that this country grouping excludes Organisation for Economic Co-operation and Development (OECD) and other high-income European countries. This directly follows the rampant liberalization after the fall of the Berlin Wall. Before this collapse of manufacturing, it was stable at about a third of GDP, falling by more than 10 percentage points by 2000. There is also a significant fall in the share of manufacturing in total employment in ECA, though not as dramatically as with value added, the difference associated with declining productivity.

Significant ongoing de-industrialization is evident for Quartile 4 (highest income per capita) countries. The share of manufacturing in employment in 2010 was less than half that in 1970, with almost as large a fall in the share of manufacturing in GDP. Of course, this de-industrialization was of a much larger initial base than for any other country group.



Note: SSA = Sub-Saharan Africa excluding South Africa; SA = South Asia; MENA = Middle East and North Africa; EA = East Asia (does not include Pacific); LAC = Latin America and Caribbean; ECA = Europe and Central Asia; HI = High-income non-OECD members; OECD = High-income OECD members.

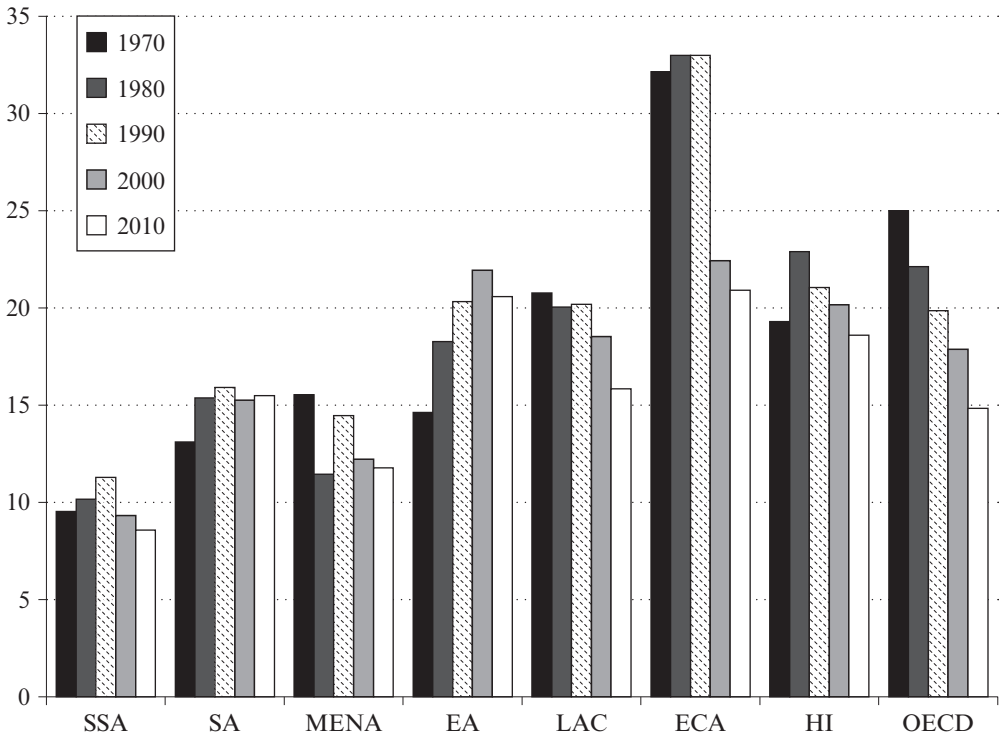
Sources: Employment data from ILO, country groupings from IMF.

Figure 38.3 Share of manufacturing in total employment, countries by region, 1970–2010

Even with the dramatic de-industrialization in OECD and other Quartile 4 countries, by 2010, only Quartile 3 had higher shares of manufacturing in employment and GDP. Even the reduced shares of manufacturing remain higher in Quartile 4 than the all-time peaks for Quartile 1. In the earlier periods, the shares of manufacturing in employment and GDP are highest for Quartile 4 countries, and in the later periods these countries are only overtaken by Quartile 3 countries. Quartile 3 countries (taken together) were already de-industrializing by this time, but just not as rapidly as Quartile 4 countries.

The literature on de-industrialization emphasizes an inverted-U relationship between income per capita and the share of manufacturing, notably in employment (Rowthorn 1994). This inverted-U relationship is evident here primarily in the trends within country groupings. However, what comes through more strongly is the de-industrialization over time across almost all country groups, with countries de-industrializing at lower income per capita and at lower shares of manufacturing (see Palma 2005, 2008).

If these trends continue, the share of manufacturing in middle-income countries will



Note: SSA = Sub-Saharan Africa excluding South Africa; SA = South Asia; MENA = Middle East and North Africa; EA = East Asia (does not include Pacific); LAC = Latin America and Caribbean; ECA = Europe and Central Asia; HI = High-income non-OECD members; OECD = High-income OECD members.

Sources: Value added data from UN, country groupings from IMF.

Figure 38.4 Share of manufacturing in GDP, countries by region, 1970–2010

only catch up with that in upper-income countries due to de-industrialization being more rapid in the latter than in the former, similarly for low-income countries catching up with middle-income countries. This ‘catch-up’ is not happening through continued industrialization among the less-developed countries, just through different paces of deindustrialization.

Following this empirical overview of trends in the share of manufacturing in economies internationally, in the following sections I proceed to discuss causes of de-industrialization, the relationship between de-industrialization and technological retrogression, premature de-industrialization, and whether de-industrialization matters for growth.

CAUSES OF DE-INDUSTRIALIZATION

Various factors causing or contributing to de-industrialization have been discussed in the literature. Rowthorn and Coutts (2004) identify five key explanations of de-industrialization: (1) the reclassification of jobs from manufacturing to services due to 'specialization' through the outsourcing of activities to domestic service providers; (2) decline in the share of manufacturing in total consumer expenditure due to a fall in the relative prices of manufactures; (3) slower employment growth in manufacturing than in services because of higher productivity growth in manufacturing than in services; (4) the negative effects of international trade (especially imports from lower-cost producers) on manufacturing employment in developed countries; (5) negative effects of lower rates of investment on the share of manufacturing (in both GDP and employment), since investment expenditure goes disproportionately into manufacturing.

The relationship between the share of manufacturing in total employment and income per capita is described in Rowthorn's well-known inverted-U curve (Rowthorn 1994). As countries' income per capita grows over time, the share of manufacturing in total employment initially grows and that of agriculture declines, through the process of industrialization. At a turning point, the share of manufacturing in total employment levels off and declines. With de-industrialization defined as a fall in the share of manufacturing in total employment, this turning-point marks the onset of de-industrialization.

De-industrialization can thus result from countries' transition into the downwards-sloping part of the inverted-U curve: the fall in the share of manufacturing in total employment as economies mature. This is the 'classical' form of de-industrialization in the literature, understood as being part of the stylized facts of a transition from the secondary to the tertiary sectors.

Palma (2005, 2008) identifies three additional sources of de-industrialization. Firstly, downward shifts in the curve over time. This means that whether or not countries reached the turning-point, there was a declining level of manufacturing employment associated with each level of income per capita. Secondly, a decline in the level of income per capita at which the share of manufacturing in total employment declined. This could be understood as a leftwards shift in the curve. Together, these shifts mean that de-industrialization is beginning at lower levels of income per capita and lower shares of manufacturing in total employment than was previously the case.

Thirdly, Palma introduces an argument that the Dutch Disease could be understood as a further form of de-industrialization. This is in the sense of a decline in the share of manufacturing in total employment over and above the above-mentioned changes. This 'excess' degree of de-industrialization is found in cases where a country discovered significant natural resources, developed export finance or tourism, or as a result of policy shifts in middle-income countries (Palma 2005, 2008).

Turning to the literature on the more specific causes of de-industrialization, on one side of an early controversy, Bacon and Eltis (1976) attribute it in the United Kingdom to a stifling of the manufacturing sector. They ascribe this to an overallocation of resources to the services sector, in particular the government sector. High taxes are required to support high government expenditure. However, since neither workers nor capitalists are willing to reduce their consumption commensurately, there is a squeeze on exports, savings and investment. Essentially, in the Bacon–Eltis hypothesis, manufacturing suffers

from a shortage of resources, being crowded out by increases in government spending. This argument evoked much debate in the late 1970s in the United Kingdom. It can be counterposed to what has been referred to as the Cambridge view of de-industrialization (see, e.g., Singh 1977; Cairncross 1978), which focuses primarily on falling demand for domestic manufactures as a cause.

One of the sources of de-industrialization identified by Rowthorn and Coutts (2004) is the reclassification of jobs from manufacturing to services due to domestic intersectoral outsourcing. This refers to the reclassification of manufacturing employees as service employees, due to an outsourcing of certain functions from manufacturing firms to specialized service providers. This has been referred to as the 'statistical illusion' or 'statistical artefact' component of de-industrialization, since it does not represent an underlying structural shift in the sectoral composition of an economy. Rowthorn and Coutts (2004, 5) argue that 'it seems implausible that this accounts for more than a modest fraction of the huge recorded fall in the share of manufacturing employment in advanced economies over the past 30 years'.

Tregenna (2010) applied a new methodology for estimating the extent of intersectoral outsourcing for the case of South Africa. The results indicate that the relatively high growth in service employment in the 2000s was based in part on the outsourcing-type reallocation and reclassification of services such as cleaning and security. Without this outsourcing, it is projected that manufacturing employment in South Africa would have grown slightly faster than employment in private services, suggesting that at least some of South Africa's apparent de-industrialization over this period was actually a statistical illusion. There is no comprehensive international evidence about how much domestic outsourcing has contributed to apparent de-industrialization, which would be important to evaluate the extent of real structural shifts.

An ongoing central debate in the literature on de-industrialization is whether it is caused primarily by domestic or external factors. More specifically, on the one hand, some studies have emphasized the effects of changes in productivity in the domestic manufacturing sector, rather than external factors. The argument here is that faster productivity growth in manufacturing than in services leads to slower employment growth in manufacturing than in services, even if output in both sectors were to grow at the same pace. Krugman (1996) and Rowthorn and Ramaswamy (1999) are amongst those who do not regard trade as a primary factor in the de-industrialization of the North. On the other hand, various studies attribute de-industrialization in the North primarily to external factors, specifically the impact of trade with the global South. Authors such as Wood (1995), Saeger (1997), Kucera and Milberg (2003), Alderson (1999) and Sachs et al. (1994) attribute de-industrialization largely to the impact of trade from the South or to globalization more broadly.

Krugman analyses de-industrialization as a 'domestic distortion' within Bhagwati's theoretical framework. Krugman critiques the argument that de-industrialization associated with import competition causes welfare losses due to positive wage differentials between the manufacturing and non-manufacturing sectors. The 'de-industrialisation hypothesis', according to Krugman, is that the loss of high-wage jobs in manufacturing because of foreign trade (as opposed to domestic changes in technology or demand) has been a major source of stagnant or falling wages among workers in the United States. He argues that 'few economists with mainstream credentials have taken the

deindustrialisation hypothesis seriously' (Krugman 1996, 5), but it has been influential on policy discourse. Krugman's extended back-of-the-envelope-type calculations suggest that only a fraction of a percentage point of the decline in American workers' incomes can be attributed to the trade-induced loss of high-wage manufacturing jobs.

Nickell et al. (2008) estimate an econometric specification based on a neoclassical trade and production model in order to decompose the decline in manufacturing and the rise in services in the OECD into the respective contributions of prices, technology and factor endowments. They find that the more rapid pace of deindustrialization in countries such as the United States (US) and United Kingdom (UK) is largely attributable to patterns of productivity growth and differential changes in the relative prices of manufactures and non-manufactures.

According to Kucera and Milberg (2003), between the late 1970s and the mid-1990s, ten OECD countries lost 3.5 million manufacturing jobs (more than half of the overall decline in those countries' manufacturing employment in that period) due to changes in world trade of manufactures. Their results attribute these losses almost exclusively to North–South trade, with all ten countries estimated to have lost manufacturing jobs from changes in North–South trade, and with changes in North–North trade having had a negligible impact. Disaggregating manufacturing job losses in the North at an industry level, Kucera and Milberg find large losses in labour-intensive industries as well as in industries that were successfully targeted by developing countries' industrial policies (such as electronics). They also find that, rather than there being winning and losing industries, there were job losses in almost all manufacturing industries in the OECD; they attribute these generalized losses to the decline in exports of manufactures from the North to the South.

Saeger (1997) observes a strong negative correlation between countries' net or gross imports of manufactures from developing countries as a ratio of GDP and the countries' change in manufacturing employment share between 1970 and 1990. Significantly, Kucera and Milberg, Saeger and Rowthorn and Ramaswamy all find the expansion in North–South trade in manufactures to account for about 20–30 per cent of the percentage point decline in the share of manufacturing in total employment in the North, using different country samples and methodologies. Similarly, according to Wood's (1995) estimates, trade with developing countries brought about a reduction of about a fifth of manufacturing employment in developed countries by 1990, with about half of this fall accounted for by changed factor content and the other half by defensive innovation. Virtually all the fall in demand for labour in his estimates is for unskilled labour.

A 1996 study by the US Department of Commerce (cited by Armah 1992) attributed 80 per cent of the total fall in manufacturing employment in the US between 1980 and 1984 to lower export-related employment. Half of this was found to be associated with a decrease in export volume, 38 per cent with increased productivity and 11 per cent with higher demand for imported inputs. Brady and Denniston (2006) find that low levels of globalization initially cause industrialization, while higher levels of globalization subsequently cause de-industrialization. Alderson (1999) finds an outflow of direct investment, as well as import penetration from the South, to have contributed to de-industrialization in OECD countries between 1968 and 1992.

Reinert and Kattel (2007) set out a taxonomy of different forms of economic integrations and a framework for analysing the effects of these. They argue that asymmetrical

free trade areas that take a 'colonial' or non-integrative form can bring about the Vanek–Reinert effect. This refers to a situation where rapid trade liberalization between countries (or regions) with very uneven levels of development leads to the destruction of the most-developed industries of the less-developed country (or region). While the more advanced country reinforces its comparative advantages in increasing-returns 'Schumpeterian' industries, the less advanced country falls back to its comparative advantage in diminishing-returns 'Malthusian' activities. This form of economic integration between countries is likely to lead to the less-developed country specializing in activities that are less technologically advanced and that require less advanced skills, with decline in the more advanced activities. Where these advanced activities are in manufacturing, the decline takes the form of de-industrialization. In extreme cases, such as Mexico, this de-industrialization can be followed by de-agriculturalization and even depopulation (Reinert and Kattel 2007).

DE-INDUSTRIALIZATION AND TECHNOLOGICAL RETROGRESSION

De-industrialization – premature de-industrialization in particular – may be linked to what Endresen (1994) has termed 'technological retrogression'. This is closely related to what has been referred to as 'primitivization' in the historical literature. Technological retrogression essentially refers to a situation in which production equipment, production organization or production methods that had been used in the past are adopted by some producers in the present. Technological retrogression almost inevitably leads to reduced labour productivity, and hence to a loss of competitiveness and growth prospects.

Endresen (1994) argues that technological retrogression should not be understood as a choice made by producers, since the retrogression may be forced upon producers by immediate economic conditions (such as a lack of access to capital). She sees 'lock-in' as a structural precondition of technological retrogression, where lock-in refers to a situation where there are no outlets for labour displaced by technological modernization and where a lack of economic diversification traps producers in a certain economic activity. Endresen emphasizes that technological retrogression is essentially a reversal of modernization. Instead of technological modernization proceeding in a linear manner over time, with the use of 'primitive' techniques preceding modernization, technological retrogression can lead to producers using less-advanced techniques than they had previously done.

De-industrialization could be considered both a possible cause and a possible consequence of technological retrogression. On the one hand, technological retrogression could be brought about by factors such as increased competition or a reduction in access to capital, and this technological retrogression could contribute to de-industrialization. For instance, where technological retrogression reduces productivity, manufacturing (or sections of manufacturing) would become less competitive internationally and hence would lose market share, leading to de-industrialization. This would probably show up in a lower share of manufacturing in value added in particular, with manufacturing employment being less affected.

On the other hand, de-industrialization itself could contribute to technological retrogression. De-industrialization could lead to reduced investment and the degrading of

technological capacity, bringing about technological retrogression. De-industrialization could also lead to the closure of established manufacturing firms, with manufacturing workers previously employed in such firms continuing in similar activities on their own but without the machinery previously utilized in the firms. For instance, de-industrialization in the clothing manufacturing sector would be likely to lead to the closure of established clothing manufacturing firms, but workers previously employed in those firms may continue sewing clothing as independent producers, using more basic equipment than the machinery previously utilized. This could be understood as a form of technological retrogression, brought about by de-industrialization. In reality, de-industrialization and technological retrogression may occur concurrently and may have common or related causes. Technological retrogression is likely to be linked to premature de-industrialization in particular.

It is also worth noting that in particular circumstances where de-industrialization either induces or is accompanied by technological retrogression, this technological retrogression may actually facilitate a form of re-industrialization (or at least mitigation of de-industrialization), albeit at lower levels of productivity and competitiveness. This may occur where there are plant closures and retrenchments of manufacturing workers, who subsequently embark on similar manufacturing activities individually or in small-scale informal enterprises. For instance, workers who lose their jobs in clothing manufacturing may engage in the manufacturing of clothing from their homes or in small groups in order to generate income. This could constitute a form of re-industrialization, or at least mitigate the extent of de-industrialization. However, it will almost certainly be at lower levels of productivity. The contribution of these activities to manufacturing employment will be higher than the contribution to manufacturing value added, given below-average productivity. Furthermore, such a phenomenon is most likely where the manufacturing is relatively labour-intensive and does not require heavy capital equipment or advanced technology.

PREMATURE DE-INDUSTRIALIZATION

When a country de-industrializes at a lower level of income per capita than would be typical by international standards, this can be considered premature de-industrialization. Widespread premature de-industrialization, among not only middle-income countries but low-income countries as well, is evident from the empirical trends discussed at the beginning of this chapter.

Premature de-industrialization is characteristically caused or triggered by shifts in policy, as opposed to being an incremental process associated with the 'maturation' of advanced economies. It is typically neoliberal economic 'liberalization' policies that are associated with bringing about premature de-industrialization: trade liberalization, liberalization of product markets, austere monetary policy and financial liberalization.

Although premature deindustrialization has become widespread in recent years among middle-income countries and some lower-income countries, it is not an entirely new phenomenon. Chile after the 1974 coup is an early example of policy-induced premature de-industrialization. This can be directly linked to the conservative economic policies implemented under Pinochet. As well as austere monetary policies, trade was rapidly

liberalized. Average nominal tariffs fell from 94 per cent in 1973 to 16 per cent in 1977, and maximum tariffs fell even more dramatically (Gwynne 1986). There was also rapid privatization of state-owned enterprises. Output and employment in Chilean manufacturing were negatively affected. With growing imports of manufactures, by the early 1980s manufacturing output was contracting significantly in real terms. Interestingly, after the displacement of the 'Chicago Boys' in 1984 and the strengthening of protection for domestic industry, manufacturing began recovering to a certain extent. This recovery was especially evident in the import-substituting sectors that had been hit hardest in the preceding decade (Gwynne 1986). However, Chilean manufacturing has seemingly never recovered the lost ground. This experience of early de-industrialization in Chile is illustrative of how policy changes can trigger de-industrialization. More recent episodes of de-industrialization in Chile could arguably also be linked to policy, in particular trade and financial liberalization.

De-industrialization in Latin America and the Caribbean is clearly evident from Figures 38.3 and 38.4. Frenkel and Rapetti (2012) take the view that it is de-industrialization, not external instability, which is the primary danger currently facing Latin American countries as a result of capital inflows. The channel that the authors posit for this relationship is capital inflows leading to real exchange rate appreciation, eroding the competitiveness of manufacturing and thereby reducing output and employment in manufacturing; it is thus a form of Dutch Disease. Their empirical analysis of Latin American countries supports this. Frenkel and Rapetti expect this de-industrialization to reduce countries' long-run growth, owing to the important externalities of modern tradable activities for growth.

Dasgupta and Singh (2006) believe that although the share of manufacturing in total employment is beginning to fall to a lower level of income per capita in many developing countries than was previously the case in developed countries, this is not necessarily a pathological phenomenon. In some developing countries it may be benign or even advantageous. They distinguish between two types of de-industrialization in developing countries. In the first type, manufacturing is not growing in the formal sector but is growing reasonably fast in a large informal sector, such that total manufacturing employment (formal and informal sectors combined) is not falling, and there may also be growth in manufacturing production. India is suggested as the archetype of this sort of developing-country de-industrialization. The second type, which Dasgupta and Singh regard as likely to be pathological, can be described as industrial failure. This took place in several African and Latin American countries in the 1980s and 1990s. Structural changes in these economies derived in part from policies imposed by the international financial institutions (IFIs), with countries specializing in their current comparative advantages rather than their long-term dynamic comparative advantages. Dasgupta and Singh warn that the long-term prospects of these countries developing modern manufacturing or services sectors have worsened.

Reinert and Kattel (2007) argue that post-1989 Central and Eastern Europe (CEE) and the newly independent countries from the former Soviet Union (NIS) experienced a form of de-industrialization akin to that in poor countries. This de-industrialization was triggered by rapid liberalization of their economies, in particular rapid trade liberalization. Industry collapsed in these countries, taking years to recover to 1990 levels. This can also be seen in Figures 38.3 and 38.4, showing the dramatic drop in the shares of manufacturing in employment and GDP between 1990 and 2000 in the European and Central Asian

countries (labelled ECA). It is noteworthy that services also declined in these countries, albeit not as dramatically as industry did. De-industrialization in CEE and NIS countries was thus very different from the natural maturation of economies and the transition to advanced services experienced in developed economies that gradually de-industrialized (Reinert and Kattel 2007). Although premature de-industrialization is generally taken to refer to developing countries, the post-1989 de-industrialization in CEE and NIS countries can thus be understood as policy-induced premature de-industrialization.

The de-industrialization of Mongolia after 1990 is an illustrative case of policy-induced premature de-industrialization and the catastrophic effects thereof (see Reinert 2004). Mongolia's earlier industrialization was itself policy-induced in a deliberate Soviet programme of industrialization. From 1991 on Mongolia implemented drastic economic liberalization, including full financial liberalization and capital account convertibility, and from 1997 all tariffs were abolished (except on alcohol). Reinert compares this programme to the Morgenthau Plan, a plan for the deliberate de-industrialization and subjugation of Germany after World War II which was not implemented, in favour of the Marshall Plan. Following these reforms, Mongolia's manufacturing sector quickly collapsed. In a number of sectors, manufacturing output fell to below 1 per cent of its 1989 levels within less than a decade, or even ceased altogether (data measured in quantities; figures from Reinert 2004 using data from the National Statistical Office of Mongolia). All manufacturing sectors (with the exception of alcohol) dropped by more than 50 per cent. Displaced industrial workers fell back to the land, and agricultural productivity plummeted, demonstrating the importance of an industrial base for the sustainability of other sectors of the economy. Mongolian de-industrialization and the associated shift to diminishing-returns activities brought on a vicious cycle of deterioration of the terms of trade, a trade deficit and an inability to import, a collapse of agricultural productivity, institutional collapse and falling real wages. Mongolia is a case study of policy-induced de-industrialization and 'de-development' of an economy, with devastating economic and social ramifications.

Apart from the role of policy in inducing premature de-industrialization, there are also important differences in the ways in which trade and globalization affect developing countries. As discussed earlier, trade with the global South has been identified in the literature as one of the causes of de-industrialization in developed countries, with debates about its importance in explaining this. A different analysis is thus needed when the focus is on de-industrialization or premature de-industrialization in the global South.

There is considerable heterogeneity amongst developing countries in the levels and stages of industrialization and de-industrialization. There are huge differences between: the global manufacturing powerhouse of China; low-income Asian emerging manufacturing forces; middle-income countries such as Turkey, South Africa and Brazil that have been de-industrializing over a long period; and low-income countries (especially in sub-Saharan Africa) that have as yet never really industrialized. This heterogeneity among developing countries is clearly visible in the divergent trends between the regional groupings shown in Figures 38.3 and 38.4.

The manufacturing power of China and other relatively low unit cost producers from Asia is important in understanding de-industrialization – and the challenges of industrialization and re-industrialization – in developing countries. Developing countries at levels of economic development that are both above and below that of China struggle

in competing with the unit costs of Chinese manufacturing. This refers not only to unit labour costs but to the overall cost structure of Chinese manufacturing.

The challenge for low-income countries is especially sharp, and is distinct from earlier de-industrialization in advanced economies that was associated with cheaper manufacturing from countries at lower levels of income per capita. The situation faced by low-income countries is that economies (notably China) at higher levels of income per capita are able to manufacture goods at lower unit costs. The dynamic in these developing countries here is thus not de-industrialization in 'grandfather industries' due to the emergence of lower-cost production in lower-income countries, as was the case in the earlier de-industrialization of advanced economies. Rather than the displacement of existing mature industries, it is actually industrialization that is being blocked as many low-income countries are unable to break into manufacturing markets. This is even the case for labour-intensive manufactures such as clothing, which have traditionally been important stepping-stones in countries' industrialization paths. There is thus a failure of nascent industries developing, at least at a rapid enough pace. Given the importance of economies of scale, positive externalities, cumulative causation and industry networks in manufacturing, this also hampers the emergence of a dynamic manufacturing sector in low-income countries.

There are thus specific dynamics of de-industrialization, and challenges of industrialization and re-industrialization, in developing countries. In earlier de-industrialization in advanced economies, manufacturing was squeezed by lower-cost imports from less-developed countries, due primarily to lower labour costs in the latter countries. Nonetheless, advanced economies had technological and other advantages over developed economies. Hence, even as they underwent de-industrialization (especially in relatively labour-intensive industries), they retained comparative advantages in other parts of manufacturing. Even while these advanced economies were de-industrializing, there were segments of manufacturing in which they retained pronounced comparative advantage over developing-country competitors.

In contrast, many developing countries today are uncompetitive against a country such as China with respect to both unit labour costs and technology. With a few exceptions, countries at lower levels of income per capita than China are almost universally behind in technology and cannot compete in producing electronics, cars and other relatively advanced manufactures. However, they also cannot compete with China on unit labour costs, and so they import goods such as clothing instead of developing their own labour-intensive manufacturing infant industries.

Further compounding the difficulty for low-income aspiring industrializers is that, even beyond China, most niche areas of low-value-added manufacturing have already been occupied by other developing countries, such as Bangladesh in textiles. Gaining the purported special properties of manufacturing requires reasonable scale in the production of specific manufactures within countries. This suggests that countries need some level of specialization in niche areas of manufacturing in order to become competitive and to industrialize. The existing competitive advantage of some developing countries in niche areas of low-value-added manufacturing of course does not suggest that other developing countries are blocked from these segments of manufacturing. However, it is unlikely that they can break in without robust and effective industrial policies.

DOES DE-INDUSTRIALIZATION MATTER FOR GROWTH?

Does de-industrialization matter for growth? Is it a pathological phenomenon or simply part of the natural maturation and development of economies? The answers to these questions depend in part on the extent to which growth is regarded as sector-specific. If growth is sector-neutral – in the sense that the effects of a unit of value added on growth do not depend on the sector in which that unit of value is added – then a change in the sectoral composition of an economy would not necessarily be expected to have growth implications. Conversely, if growth is sector-specific, then a change in sectoral structure could affect economic growth. From a Kaldorian-type perspective, manufacturing is thought to have superior scope for learning-by-doing, increasing returns to scale and overall for cumulative productivity increases, strong growth-pulling linkages with the rest of a domestic economy, technological progressivity and other characteristics that accord it a special role as an engine of growth. This would suggest that a decline in the share of manufacturing in an economy could be expected to diminish a country's growth prospects, especially in the medium to long term.

Tregenna (2014) put forward a new conceptualization and typology of de-industrialization based on a Marxian theoretical framework. This combines the sectoral approach, which is the basis of the standard approaches to de-industrialization, the position of an activity in the circuit of capital. De-industrialization is thus conceptualized both in terms of the sectoral composition of surplus-value-producing activities and as a shift between those activities that produce surplus value and those that do not. Structural change can thus be analysed in terms of both sectoral specificity and other important dimensions of activity specificity, including what can be termed the level of 'technological-organizational' advancement. This allows for a distinction between two forms of deindustrialization: 'Form I' de-industrialization refers to a relative decline in manufacturing and a relative increase in non-surplus-value-producing activities; 'Form II' de-industrialization refers to a relative shift from manufacturing to other types of surplus-value-producing activities. These are likely to have different effects on growth. The use of Marxian tools of analysis can bring out the heterogeneity of diverse types of de-industrialization and the different ways in which they can affect growth.

Whether de-industrialization matters for growth is also likely to depend on the circumstances and nature of the de-industrialization. The level of income per capita at which de-industrialization commences in a particular country, and how this compares to typical international patterns in this regard, would be one of the relevant circumstances. The extent to which de-industrialization is triggered or accelerated by a policy change (such as a tariff liberalization), as opposed to just gradually taking place over time with economic development, is also germane to the probable effects of de-industrialization on growth. Another aspect is the nature of the particular manufacturing activities that are (relatively) declining and of the non-manufacturing activities that are (relatively) growing. This includes the extent to which each of these activities are technologically advanced and the extent of their positive externalities for the rest of the economy.

Even taking account of these dimensions and of the specificity of particular de-industrialization processes, on the balance of probabilities it is most likely that de-industrialization will negatively affect a country's growth. As Reinert (2004, 177)

observes, 'a nation with even an inefficient manufacturing sector will be infinitely better off than a nation with no manufacturing sector at all'.

The extent to which manufacturing has been an engine of growth has been empirically tested by Szirmai and Verspagen (2011) for a panel of 88 countries over the period 1950–2005. Overall, they find a moderate positive effect of manufacturing on growth, with no such effect evident for services. However, when the time period is broken down, the direct effect of manufacturing on growth is only apparent for the subperiod 1970–1990. The authors argue that since 1990 manufacturing has become a more difficult route to growth than was previously the case. More human capital is now required to gain the same positive marginal effects of manufacturing expansion than was previously the case, and the catching-up bonus has diminished. Szirmai and Verspagen thus argue that it is now increasingly difficult for middle-income countries to benefit from manufacturing as an engine of economic growth.

According to Szirmai and Verspagen's calculations, in 1950 the average share of manufacturing in GDP for developing countries was just 12 per cent, much lower than the average share of 29 per cent for advanced economies. Significantly, the share of manufacturing in GDP for developing countries never rose above a peak of 18 per cent (in the early 1980s), well below the earlier peak of 30 per cent for advanced economies.

From an international econometric analysis, Dasgupta and Singh (2006) conclude that the manufacturing sector plays a critical role in economic growth. Although a similar econometric result is found for services, Dasgupta and Singh argue that in terms of causal interpretation of the model, services do not necessarily play a similar role to manufacturing as an engine of growth.

Most studies of the effects of de-industrialization on growth are for advanced economies. A study of de-industrialization in developing countries (Pieper 2000) finds industrial performance to be correlated with overall economic performance. Industry has a strong influence on aggregate productivity and employment outputs. Pieper's results show 'productivity de-industrialization' to be associated with negative aggregate productivity growth. Slow industrial growth seems to lead to 'low road development' in which there is a trade-off between productivity growth and employment growth.

Any negative effects of de-industrialization are likely to be particularly pronounced in developing countries, especially low-income developing countries. Three main reasons can be put forward for this, all related to the point of development at which de-industrialization commences.

Firstly, compared to de-industrialization in advanced economies, premature de-industrialization typically sets in not only at lower levels of income per capita but also at a lower share of manufacturing in the economy. This suggests that a country will have obtained less of the benefits of manufacturing for broader economic growth by the time de-industrialization begins. Secondly, the sustainability of a dynamic services sector is questionable under such circumstances. The services that develop are unlikely to be technologically advanced services with the sort of desirable qualities for growth that have been attributed to manufacturing in Kaldorian-type approaches. The types of services that 'replace' manufacturing in a low-income de-industrializing country may be, for example, low-value-added consumer services. In an advanced economy, at least some of the types of services that are 'replacing' manufacturing may be relatively high-technology, high-skills, tradable, increasing-returns producer services with strong

linkages with the rest of the economy. But this is unlikely to be the case with premature de-industrialization. Thirdly, the typical causes of de-industrialization are different in developing and developed countries. In the former, de-industrialization is commonly brought on by policy shifts, especially trade liberalization and/or tight monetary policy. This is not the sort of incremental 'maturation' found in advanced economies (which may well still have negative effects on growth but of a different form and magnitude). These three differences, and reasons for why de-industrialization is likely to be more deleterious in less developed countries, are closely related to one another.

CONCLUDING REMARKS

It is important to recognize that there are very different types of de-industrialization. One important dimension of these differences is in the level of income per capita at which de-industrialization begins. In general, the effects of de-industrialization can be expected to be more negative, the lower the level of economic development at which it commences. A second important dimension is the nature and characteristics of the manufacturing activities that are in relative decline, and of the non-manufacturing activities that are relatively growing. Of particular relevance here is the scope in each of these activities for cumulative productivity increases (as well as other pro-growth characteristics, such as contribution to the balance of payments). Notwithstanding the common denominators that demarcate sectors, there is enormous heterogeneity within sectors with respect to these characteristics. A third key aspect that distinguishes different types of de-industrializations is the dynamics of the de-industrialization process itself, in terms of what is happening with manufacturing output (both the share and level), manufacturing employment (both the share and level) and manufacturing productivity (see Tregenna 2009, 2011, 2013). Where the share of manufacturing in total employment declines due to productivity rising more rapidly than in the rest of the economy, while the absolute level of manufacturing employment and output as well as the share of manufacturing in GDP all rise, this is probably not pathological and would not be appropriately characterized as de-industrialization. This is very different from a situation where the manufacturing sector as a whole collapses.

So, for instance, 'grandfather' manufacturing industries or manufacturing activities which are not especially technologically advanced, which are not strongly linked in with the rest of the domestic economy, and which are not enjoying significantly increasing returns to scale, may be supplanted by niche services activities that actually have stronger Kaldorian-type properties. While there are likely to be immediate negative effects for the individuals and regions directly affected by this form of de-industrialization, the overall economic effects are probably progressive and good for economic growth. This is a fundamentally different economic phenomenon from a case in which premature de-industrialization is brought about by economic policy 'liberalization' and in which the most advanced segments of a developing country's manufacturing are destroyed. De-industrialization in cases such as the destruction of manufacturing in Eastern Europe post-1989, and the 'pre-industrialization de-industrialization' in many sub-Saharan African countries, are not only bad for growth but are just plain ugly.

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39. The post-Soviet industrial extinctions and the rise of jihadi terrorism in the North Caucasus

Georgi Derluguian

By way of exercising our sociological imagination, let us picture the range of stylized micro-situations emerging in the wake of a macro-trend generically called de-industrialization. A man (and as a former industrial worker, he is likely an adult male) loses his previously secure and relatively well-paying job in the industry that disappeared in his corner of the world. Conceivably, this man can retrain towards another productive occupation or migrate elsewhere where his work skills might still find adequate use. These are in fact the two forms of mobility prescribed by the mainstream labor economics. But what if our unemployed man is located in one of the world's 'rustbelts', where industrial jobs went extinct wholesale? What if his passport, ethnic culture, skin color or all of the above do not permit easily crossing the national jurisdictions in this imperfect world where capital and trade are global but labor mobility remains restricted? This is already a subject matter for the sociology of migration, its barriers and cultural stigmatization. And so, our man stays stuck in his depressing corner of the world and quite possibly he gets depressed, too. Under stress, he develops a disease or an addiction to whatever the numbing substances common in his locale, whether alcohol or narcotics, which would eventually kill him. The sad personal trajectories of this kind aggregate much into the datasets concerning the demographers of health and substance abuse. Depressed people can kill themselves even faster by direct suicide. Crime is another possible outcome of despair, especially among the younger and more vigorous men. This is the research territory claimed by yet another social science specialization, criminology.

The range of possibilities, however, is not yet quite exhausted. Imagine that our structurally redundant man inhabits the social environment only briefly touched by the great industrial urbanization of the post-1945 epoch. Traditional rural culture still prevails in scripting the dispositions and behaviors through the institutions of extended family, inherited religion, and the caring but also strictly censoring local communities. To some extent, this might look like a happier situation in the very literal sense of people feeling surprisingly happier and healthier than their bleak material circumstances would otherwise suggest (Smolkin 2008; Starodubrovskaja et al. 2011). Religious prohibitions and the support network of relatives and neighbors might not allow such men to drink themselves to death or suddenly succumb to heart failure from feeling irrelevant and lonely. In the studies of post-Soviet countries this phenomenon came to be known as the 'Muslim paradox'. In the traditionally Islamic republics of the North Caucasus and Central Asia, despite marked poverty, male mortality is remarkably lower compared to the more modernized ethnic Russians (Guillot et al. 2011).

But not all is happy in the North Caucasus. The ongoing anti-Russian jihadi insurgency in this region and, tragically, the terrorist bombing at the finishing line of the 2013 Boston Marathon serve as brutal reminders. The policy-makers and analysts, long

pressed to offer root remedies against the scourge of religiously motivated terrorism, commonly prescribe socio-economic development. This, however, is a very broad prescription, whose vague and unspecific formulation opens it to the charges of inviting waste and corruption in the developing countries where the governance practices are called 'neo-patrimonial'. Afghanistan and Iraq then supply proof to pessimistic thinking.

This chapter attempts a clarification at three historical horizons. First, it is necessary to grasp what makes the North Caucasus traditional culture special, and to hear the long-standing objections of anthropologists warning us that there can be no generic 'traditional culture', but rather many pliable and adaptable human cultures that existed on the planet before the advent of modern industrialism. Regarding the North Caucasus, and mainly for the tiny Russian Federation republics of Daghestan, Chechnya, Ingushetia and Kabardino-Balkaria, I will argue that the surviving traditional norms, which under the post-Soviet conditions became once again conducive to insurgency, specifically refer to the cultural complex of the mountain warrior defending the faith and avenging the dignity of his community. The cultural complex of the warrior and outlaw avenger (called *abrek* in the North Caucasus, see Gould 2016) is not, in fact, too old historically. It coalesced and became legendary during the nineteenth-century raiding wars against the Russian colonial conquest.

Second, I will briefly revisit the Soviet industrialization and its profound social consequences for the North Caucasus highlanders. If it were only totalitarian and cruelly destructive of traditional Muslim societies, what would then explain the present-day nostalgia for the Soviet institutions and symbols, from the collective farms, children's Young Pioneer rituals like the summer camps, the heroic memory of World War II and even the portraits of Stalin defiantly displayed under many automobile windshields? My hypothesis is that the Soviet industrialization generated many modern, yet traditionally 'manly' dignified occupations in military service, education and industry in the framework of a large strong state capable of long-term policies, social guarantees and a heroic ideology in the form of Soviet non-ethnic patriotism. This is what the Circassians, the Chechens and the Daghestanis are missing now with the passing of Soviet modernization.

The explanation and policy recommendations of this chapter mesh insights from theories of gender (and then the male gender) with the insights of developmental economics. Perhaps this theoretical combination looks unusual, but I hope to convince the reader who endures the necessary empirical and historical excursus, which I also promise to keep short.

WHEN PEASANT REBELLION WAS A SUCCESS

Two major innovations arrived in the Caucasus during the seventeenth and eighteenth centuries from the West or via the West: guns and maize. After a few generations of necessary adaptation to the new climate, the New World crops such as maize and beans produced wonders (McNeill and McNeill 2003). Maize proved nearly three times more productive than the native varieties of wheat and millet. The local names for maize are telling. Maize is called 'Egyptian wheat' in Armenian, because Egypt had long served as the epitome of bountiful crops. The Chechen name literally means the 'grain of Hadji', a blessed import from Holy Lands. The Circassian is *nartykh*, the 'bread of epic warriors',

the Narts. Maize could feed both many more people and domestic livestock. The result was a tremendous demographic growth (Tsutsiev 2014).

Guns proved a no less great equalizer in the Caucasus than in Texas. Daghestani artisans soon learned how to manufacture their own guns with grooved barrels, that is, true rifles, although still loaded slowly from the muzzle side. The grooved barrels were made out of three strips of steel that the Caucasus gunsmiths heated, braided and hammered over a metal rod. Such guns were remarkably superior to the smooth-barreled muskets but also took much longer to reload. This produced the peculiar highlander tactic. Once the first deadly accurate shot was fired from the rifle, preferably from behind a tree or rock, the attackers then either fled to prepare for another volley or fought ferociously with their daggers and light sabers, the famous Circassian *shashka*. It is estimated that in the first half of the nineteenth century the gunsmiths of Daghestan were producing between 10 000 and 20 000 guns a year, a truly industrial output (Astvatsaturyan 1994). Prices had dropped to levels where a rifle could be purchased for the equivalent of 7–10 sheep. Firearms became affordable to commoner farmers, who were in frequent conflicts with the roving noblemen over the slaving raids and protection rents. The elite horsemen traditionally fought in expensive chainmail and mounted on their wonderful steeds that could cost as much as the equivalent of many hundred cows. But now a cheap, accurate bullet sent from behind a tree (a typical hunting technique which did not require lifelong training, unlike fighting on horseback) rendered useless such splendid aristocratic armor and horsemanship (McNeill 1982).

Islam served to institutionalize the liberating outcomes of the commoner class struggles. As late as in the eighteenth century, native highlanders were practicing some sort of religious syncretism, mixing elements of Christianity, Islam, and the local ancestral and fertility cults (Zelkina 2000). The eighteenth century became pivotal in the configuration of economic, military and now ideological power in the North Caucasus. The successful commoner rebellions created a whole new ethnopolitical and religious map. From the highlands of Daghestan and Chechnya to the Black Sea coast new self-governing communities emerged as either the democratic ‘cantons’ (*jamaat*) or the ‘free tribes’ of the Circassian hills. Governance passed to the assemblies of the male heads of household, who claimed essentially the same rights as the lords: to bear arms, own property (including slaves), and participate politically in organizing war and community affairs. The free cantons and tribes formed alliances and leagues for mutual defense, protection of property and life, adjudication of disputes, safe passage for the herds and trade caravans and, not least, transcendent religious practice, including the pan-ethnic pilgrimages, a network of schools and proselytizing by the prestigious savants (Aglarov 1988).

The ideological sanction for this democratic reorganization of social power was provided by the network of Islamic Sufi teachers, whose literate reading of the Quran and Sunna differed markedly from the hierarchical Islam of the contemporary Ottoman and Persian empires. Yet the form of Islam that was spreading in the North Caucasus in the eighteenth century was closer to the original teachings of Muhammad developed in the Bedouin tribal society of Arabia. Islam arguably differs from other world religions in having coalesced in the stateless periphery of ancient empires, rather than within the empires like Christianity or Buddhism. At its root, Islam was the transcendent religion of moral salvation fitted for the anarchic tribes – just like the Caucasus highlanders in the eighteenth century.

Yet another world-historical parallel possibly emerges from this story of mountain rebellion. In the epoch of the Caucasus wars the Russian imperial officers, who were steeped in classical education and the Romanticism of the early nineteenth century, readily recognized in the Caucasus highlanders the civic and warrior qualities of Classical Antiquity. Later Russian and Soviet scholars, however, dropped the comparisons of contemporary Muslim peasants to the high examples of Ancient Greece and Rome because this seemed to violate the historical logic of evolution. They were wrong. Antiquity was neither a stage of historical development nor all that unique. Various kinds of warrior democracies had emerged among the free and property-owning commoners at the frontiers of complex societies from the Celtic and Germanic fringes of the West to the mountains of Morocco and the highlands of Burma (Earle 1997; Gellner 1969; Mann 1986; Scott 2009). The Greek *polis* and Roman republic grew into some of the most complex of such examples due to their relative proximity to the centers of ancient civilizations and the geopolitical opportunities this offered for trade and plunder. I am not going into the fascinating scholarly controversies here about social evolution and the sources of social power. Just think what it was to be the neighbors of the Spartans or the Vikings at the height of their assertiveness.

The Russian Empire arrived in the North Caucasus right in the midst of rebellious transformation. The Tsar's generals could not side with the peasant rebels. The Russian aristocrats themselves back at home lived in perennial fear of serf peasant rebellion. An instructive contrast to this confrontation is observed in Transcaucasia. In the lands of Georgia, Azerbaijan and Armenia, the Russian rule had soon been firmly established. The native aristocracies, both Christian and Muslim, opted for imperial service in the face of a superior force but also for the tangible benefits awarded to the recognized nobles by the Russian rulers. In turn, the native nobles brought into the scheme of imperial rule their local skills and the networks of control over the native peasants. The imperial architecture thus combined in a bargained manner the elements of direct and indirect rule. But in the anarchic North Caucasus the Russian administrators could not find acceptable counterparts willing or capable to control their own societies effectively.

Since the infamous (or, in the colonial sources, glorious) governorship of General Alexei Yermolov in 1816–1828, the Russian forces practiced a systematically punitive strategy of counter-insurgency in the Caucasus (Gammer 1994). The simple, brutal calculus of violence in such a war suggested to the highlanders that it was better to escape into the mountains and fight than to wait for another summary execution by General Yermolov's expeditionary forces. The resistance of the North Caucasians found ideological unity and a template for the organizational reformation in a literalist interpretation of the teaching of Mohammed. Pious literalism, however, did not exclude a number of inventive novelties, including the attempt to cast cannons and the separation of resistance forces into village defense militias, the internal police units and the elite strike force of mounted raiders. From 1834 to 1859 the Holy War (or Ghazavat, *razzia* in colonial English, the religiously sanctioned raiding of infidel territories) encompassed almost the whole extent of the North Caucasus from Daghestan to the Black Sea coast of Circassia. Its legendary leader was Imam Shamil, a Daghestani commoner who became at the same time a charismatic Sufi mystic, the planner of a sustained resistance war, and therefore also a state-builder.

The most awkward fact is that the Russian Empire, at last, could take control of the

North Caucasus by buying off and co-opting the state structures created under Shamil during the 25 years of his Imamate (Pokrovsky 2000). Shamil himself surrendered on exceptionally honorable terms. Some diehards chose to fight to the bitter end. But many of Imam Shamil's erstwhile regional governors, judges and commanders (or their juniors) remained in essentially the same positions of authority, albeit now with Russian sanction. In the areas where Imam Shamil had less direct influence, mainly in the western parts of Circassia, Russian commanders opted for the violent expulsion of 'ungovernable' highlanders to the Ottoman side. Today Circassian nationalists are campaigning to brand this expulsion genocide.

The effects of this historical past endure to our day primarily through engendering the peculiarly North Caucasian kind of masculinity. The Caucasus cultures have always centered on the figure of *abrek*, the heroic outlaw eager to prove himself in fighting for his own honor and that of his family, friends and ethnic community. The manly behavior of *abrek* is distinctly noble, even if he might not be a noble himself. The *abrek* identity dictates courageous self-discipline, a muscular competitiveness in the company of peers and ceremonious deference to elders, and in general a very rigorous observance of traditional patriarchal norms. It also prescribes disdain for enrichment and austerity in everything except the items of manly display, such as personal weapons or fast, preferably black cars in our day.

Here comes an important contradiction. The Caucasian male is not supposed to show concern for mundane work or money, yet he must regularly entertain in style a wide circle of friends, possess items associated with prestige, and lavish his wife and sisters with gifts including expensive jewelry. The means for such ritual display must be obtained in whatever way, including raiding for booty or engaging in the various forms of smuggling (Mars and Altman 1983).

THE RISE AND DEMISE OF SOVIET INDUSTRIALISM

To the reader of this volume it should be plainly obvious that the Soviet experience was not exceptional. The Bolshevik eschatological zeal and ferocity logically if not inevitably produced the Gulag and Iron Curtain. But in practice they really advanced not Marxism but rather Bismarckianism as the geopolitical strategy of compensating for the lack of capitalist resources with bureaucratic coordination and coercion (Tilly 1992; Allen 2003). National federalism governed by a single party, however, was Lenin's singular improvisation (Suny 1993). The 'affirmative action empire', in the succinct characterization by Terry Martin (2001), together with a tremendous military-industrial expansion, generated whole echelons of modern occupations with enough prestige and comforts to incorporate the natives of national republics. Thanks to the Soviet institutions of education and promotion, the child of a mountain Muslim peasant could become a pilot, like General Djohar Dudayev; or a symphony orchestra conductor, like maestro Yuri Temirkanov; or a more mundane bureaucratic manager at a *kolkhoz*, factory or party district committee. The proof of the success of Soviet nationality policy is the long period, especially after 1945, when national republics became fairly coherent and tame institutions structured the life aspirations of their inhabitants in accordance with overall Soviet ideology and industrial plans (Lubin 1984; Marshall 2010).

The republics lost coherence and, in the worst cases, governability only later into *perestroika*, when Moscow was suddenly plunged in a series of dual-power crises during 1990–1993. This soon turned into the scramble for Soviet spoils, part of which we know as ethnic conflicts (Lieven 1998). When the communist cadres lost their organizational coherence and began violating their own ideological taboos as an escape, the USSR was doomed – though probably not before 1990.

The opponents of communist *nomenklatura* everywhere were ‘civil societies’, namely the politicized networks of intelligentsia and specialists seeking to mobilize support from the wider population. Invariably these efforts centered on nationalism, whether in Poland and Hungary or in Kyrgyzstan and Azerbaijan. The difference in the outcomes was determined by two parameters: proximity to the West, and internal class and demographic composition (Derluguian 2005). The former was a world-systemic condition. Put crudely, Western elites agreed to ‘buy’ the nearest countries of the former Soviet bloc on the condition that the elites of those countries would maintain governance and suppress their nationalist radicals. The countries further to the east, however, could not expect a full European bargain. Both their intelligentsia ideologues and bureaucratic rent-seekers had to look for a different destination.

The latter condition relates primarily to the internal political economy of Soviet developmentalism. It boils down to how deep industrialization was in different republics, and therefore how assimilated the effects of modern urbanization had become, and to what Norbert Elias (1978) famously called the ‘civilizing process’. A simple measure of it is how many sub-proletarians were left on the margins of the social structure in proportion to the middle-class specialists and regular ‘worker aristocracy’. Even more simply, look at the demographic data, especially the birth rates, family size and the proportion of men under 30 in the age pyramid (Furman 1999). Those men could be the most enterprising and hardy job seekers in any country undergoing industrialization, as in fact they were in the Soviet years (Barsukova 2002; Guzhin and Chugunova 1988). But the sub-proletarian ‘toughs’ could also be the most active law-breakers, street rebels or fighters (Bourdieu 1973; Gambetta 1993).

BACK TO FEUDALISM

The dramatic loss of bureaucratic discipline in the moment of panic created two kinds of opportunities pre-structured by the administrative resources of Soviet cadres (Solnick 1998). The managerial *nomenklatura* in charge of economic sectors and profitable enterprises now sought to privatize their competences. Ridding themselves of Moscow supervisors, they could now autonomously play the game of transforming economic resources into private wealth and political connections (Nikulin 2002). The governors in charge of national republics sought to maximize their sovereignty, which was not merely a concession to the intelligentsia and popular nationalisms. In the main, sovereignty was intended to bolster the bargaining positions of rulers who were attempting to manipulate external sources of rents (aid, credits or simply corruption loot) as well as doling out rent opportunities among their clients internally. All this meant wasting the erstwhile collective advantages of superpower for the sake of immediate pillage and private protection in the intersecting forms of corrupt patronage and organized crime (Volkov 2002).

We have finally arrived at the point where the arguments can be connected. The disintegration of Soviet developmentalist dictatorship created violently chaotic, yet strictly bounded patterns of private patronage based on the ongoing redistribution of rents (Fisun 2002). Ethnicity or, even more narrowly, 'clan' supplied social connections and ideological legitimation to these inherently exclusionary practices of micro-power (Schierup 1992). Hence the rapid transformation of *perestroika*-era nationalisms into lateral ethnic conflicts, fought usually among the adjacent or intermingled nationalities rather than against the imperial center; and later in the 1990s, when such conflicts had run their course, into tenuous stabilization under the patronage of various local strongmen.

But the restrictive and exclusionary logic of patronage was now generating tensions within the ethnic communities themselves. Patronage, by definition, is monopolistic, which leads to an often scandalous overaccumulation in some elite cliques and growing resentments among the excluded (Eisenstadt 1973). In the less-developed areas a severely biased distributive pattern would often be aggravated further by the demographic pressures from the younger and poorer generations. In itself, this situation need not produce armed violence. The excluded people can seek to emigrate, or survive by forming larger families and relying on subsistence. They can also die out in increased numbers because of stress or addictions. Certainly we observe such outcomes across the post-Soviet republics (King and Stuckler 2007). But what would happen in a social context where family networks remain extensive and psychologically supportive, where the despairing young men would not be allowed to become drunks but instead would be married young and burdened with traditional family obligations? Such men might be expected to turn to religion, especially in the historically Islamic areas, because Islam carries a particularly strong ethical message of family loyalty. We see this happening, too.

Religious fundamentalism, however, is not immediately conducive to political radicalism and violence. This was robustly established in numerous recent studies among a variety of Islamic communities (Sageman 2008; Kurzman 2011). There remains something else which is present in the North Caucasus but not in, say, Azerbaijan or Turkmenistan. This might be the *abrek* masculinity of highlanders surviving in the male complexes of elevated personal honor, daring, special ceremoniousness and peer competition. Notice, for instance, how wildly popular martial arts are among young males of the North Caucasus.

Yet this is an enabling but still not sufficient condition. The collapse of the state in Chechnya as the result of the 1991 rebellion was a local historical contingency. It was far from inevitable, yet for a number of complex reasons it has succeeded. The Russian invasion in 1994–1996 was also a series of avoidable blunders (Lieven 1998). But the disaster did happen. Even though Moscow has eventually learned how to use local warlords to keep the situation from boiling over again into open and massive warfare, the war created a lasting chain of nasty effects. In the absence of this war, along with the violent dispositions and international ideological connections it has brought, corrupt political patronage would breed much misery and resentment, but not the sustained revenge campaign against the unjust order waged by a few desperate and humiliated young individuals (Hislope 2002).

In order to end this violence the whole causal chain dating back to the Soviet collapse must be run in reverse. The key to it is the restoration of a modern state willing and capable of enforcing law rather than private protection, and willing to generate modern

industrial occupations rather than disbursing rents and patronage (Reinert 2007). It is, in fact, a global agenda today. In the absence of effective state power and new industrialization the default historical option remains the rather illusionary pursuit of social order and meaning through the religious revivalism.

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40. Epilogue: the future of economic development between utopias and dystopias

Erik S. Reinert, Sylvi Endresen, Ioan Ianos, and Andrea Saltelli

WHAT LIES AHEAD IN TERMS OF ECONOMIC DEVELOPMENT? UTOPIA VERSUS DYSTOPIA

Without the Utopians of other times, men would still live in caves, miserable and naked. It was the Utopians who traced the lines of the first city . . . Out of generous dreams come beneficial realities. Utopia is the principle of all progress, and the essay into a better future.¹

While these wise words by Anatole France (1844–1924) no doubt are both important and correct, the Spanish painter Francisco de Goya (1746–1828) made what almost amounts to the opposite point in his 1797 *The Sleep of Reason Produces Monsters* (*El sueño de la razón produce monstruos*) (Figure 40.1).

The full epigraph for this etching reads, ‘Fantasy abandoned by reason produces impossible monsters: united with her, she is the mother of the arts and the origin of their marvels’. The slumbering artist is surrounded by bats, symbols of ignorance, and owls, which somewhat surprisingly are interpreted as symbols of folly. If there is any symbol of bravery and good judgement in the picture, it is the watchful and worried lynx, the symbol of wisdom.²

Utopias – literally meaning ‘nowhere’ or ‘no place’ – essentially arise from our desire to make the world a better place. There have been many of them: *The Faber Book of Utopias* (Carey 1999) lists more than 100. When they work well, they function, in the terminology of Francis Bacon (1605), as ‘feigned history’: histories of the future written in order to influence the future, attempting to create self-fulfilling prophecies. When they do not work – when their assumptions are inconsistent with basic human nature and/or their methods are too brutal – they may turn into what Goya calls ‘monsters’: utopias that become dystopias.

It is worth noting that academic economics during the early part of the 20th century showed considerable interest in utopias, both at Harvard and Columbia.³ The textbook used at the time to give an overview of utopias ‘or schemes of social improvement’ in many languages was Kaufmann (1879).

Bacon’s logic for utopias, mentioned above, may also apply to dystopias. Accounts of future perils may function as ‘feigned history’ as well. As Cambridge economist Herbert

¹ Anatole France, quoted in Mumford (2003 [1922], 14). See also Fuz (1951, 2).

² Tellingly, the world’s oldest scientific academy, from 1603, Rome’s Accademia dei Lincei, has the lynx (Italian: *lince*) as the symbol of the institution.

³ For a discussion see <http://www.irwincollier.com/kaufmann-bibliography-utopias-more-to-marx/>. Accessed June 2016.



Source: Metropolitan Museum of Art, Gift of M. Knoedler & Co., 1918: <http://www.metmuseum.org/collection/the-collection-online/search/338473?=&imgno=0&tabname=label>.

Figure 40.1 Francisco de Goya, *The Sleep of Reason Produces Monsters* (*El sueño de la razón produce monstruos*)

Somerton Foxwell (1899, xxi) put it: ‘Just as we may avoid widespread physical desolation by rightly turning a stream near its source, so a timely dialectic in the fundamental ideas of social philosophy may spare us untold social wreckage and suffering.’ In this spirit, this chapter will discuss some dystopian themes of the present, among them the apparently contradictory simultaneous trends of, on the one hand, a fear of losing jobs to mechanization by robots, co-existing with a real and observable trend towards technological retrogression (‘primitivization’) on the other. In some parts of the globalized world economy adding extraordinary amounts of capital behind every worker in robotized factories seems in other geographical areas to be matched by the exact opposite trend: sharply decreasing amounts of capital (‘substituting horses for tractors’) behind every worker.⁴ As we shall see this trend is also visible inside the European Union.

An interesting case of using a dystopia in a constructive way is Derek de Solla Price’s 1963 book *Little Science, Big Science, and Beyond* which predicted that science would reach saturation (and in the worst-case scenario, senility) under its own weight, a victim of its own success. This Epilogue should be seen in the same light: the authors are worried that economics, as the result of the tools that the profession has chosen to employ, has come to disregard a number of issues that threaten general welfare. It just may be that the post-World War II (WWII) period brought together a unique set of technological⁵ and political factors which at the time were taken for granted, but which will be difficult to replicate. We find it particularly worrisome that while growth in the post-WWII period⁶ clearly took place under dynamic and very imperfect competition – in the markets both for goods and for labour – the economics profession at the time built static models based on the opposite, on perfect competition. What we may be seeing now is that the world actually starts behaving less like it used to do in the heyday of capitalism, and more like the models of that era. Not understanding what made the West rich prevents us from seeing why so many now are getting poorer. The failure of the profession to foresee the financial crisis is one thing; its present failures to understand increased poverty, the disappearance of the middle class, and migrations caused by de-industrialization may be even more serious. As we shall briefly discuss, the profession’s recent leaps into the mysteries of ‘institutions’ and ‘human behaviour’ do not solve the basic underlying problem of explaining why economic growth, by its very nature, is so uneven. A venture into the complicated field of industrial dynamics would have been more fruitful, but that remains the path not taken. This volume has attempted to take a different path, and this Epilogue should be read not in the spirit of pessimism, but in the positive spirit of bringing back past tools and types of understanding that will offer us a better grasp on reality.

What in the end developed into monsters are not only the products of what Keynes (1982 [1933], 233) called ‘madmen in authority’, but also apparently rational economic theories and visions that went wrong because they did not comply with the test of reality, with Goya’s reason. Just like the true metabolism of Volkswagen’s diesel engines – exposed in the autumn of 2015 – the brutal results of dysfunctional economic theories can be withheld from the public at large for a long time, but rarely forever. The dysfunctionality of neoclassical economics, for a long time a curse for the non-Western world,

⁴ This is discussed already in Reinert (2007), chapter 5.

⁵ For a discussion of the different properties of technological periods, see Perez (2002).

⁶ As well as during the latter part of the nineteenth century.

has now come back to haunt the West itself. Therefore, a main thrust of this Epilogue is how neoclassical economics, like Frankenstein's monster, in many ways is turning against the West itself.

At the time of writing, in spring 2016, the world is facing many pressing issues, and again there are visions of both utopias and dystopias in the area of economic development. Here we attempt to analyse some of the more pressing concerns, and seek some assistance from history in assessing them. With neoclassical economics gradually fastening its grip on world economic policy, we have seen processes of de-industrialization and falling real wages that started in the mid-1970s. This was the period when real wages peaked in the United States, but it was also the time of de-industrialization and a dramatic fall in wages in many small Latin American countries. Next followed a dramatic fall in real wages, and life expectancy, in the former Second (communist) World. Now the European Union,⁷ starting from the peripheries, is experiencing the same falling real wages.⁸

The negative trends that can be observed at the moment are not new, they have been experienced and tackled before. But left with what is largely a caricature of its own past, it is doubtful whether the economics profession will be able to recover the qualitative – rather than quantitative – understanding it once had. Or, as Thorstein Veblen put it, education (in this case in economics) may contaminate healthy instincts or healthy common sense.

In our view there are many examples of dystopic – rather than utopic – mechanisms presently at work in the world economy. Our contention is that we did not understand how the West got rich, and as a result we: (1) failed to make most Third World countries rich, and above all failed to understand the relationship between economic structure, wealth and human fertility; (2) fail to understand why we in the West are getting poorer; and (3) fail to understand that the waves of migration towards the West are a case of 'the chickens coming home to roost': of the price paid for Western colonial economic policies. As Harvard political scientist Karl Deutsch put it long ago:

If Asia and Africa have nothing better to choose as an alternative to communism than local dictators backed by foreign governments and dependent upon foreign aid, it is very doubtful indeed that the West will win. There is the danger that the forces of nationalism will merge into a torrent of popular hatred towards the West – a torrent of hostility that would very seriously strain our limited manpower and resources that might involve us in a chain of conflicts without foreseeable end. (Deutsch 1969, 90–91)

What was difficult for Deutsch to see in 1969 was the increased role of religion and the diminished role that communism would play in this process. Apart from that, it is probably fair to say that the prediction was accurate.⁹

We would argue that after WWII, with the 1947 Havana Charter allowing for global industrialization (see Chapter 15 in this volume), the world was on the right track. However, with neoclassical economics gradually becoming 'the only game in town', David Ricardo's trade theory and accompanying colonialist trade policies again came

⁷ For well-informed comments on the dystopian developments inside the European Union, see the blog of former chief economist of UNCTAD, Heiner Flassbeck <http://www.flassbeck-economics.com/>.

⁸ This is discussed in Reinert (2012b).

⁹ For a discussion of religion and development, see chapter 1 of this volume.

to virtually monopolize Western economic thinking. In order to understand this development it is necessary to look at the broad picture of twentieth-century ideology: how the ideological ‘ahistorical twins’ of communism and what was once called Manchester liberalism were tamed, only for one of the two – at the death of its peer – to destroy what once was a pragmatic Western ideology.

THE DECLINE OF THE WEST AS SEEN FROM THE EAST

In 2015 Singapore celebrated its fiftieth anniversary as a nation-state, marking an astonishing 3700 per cent per capita growth in GDP over the period. Situated a few degrees off the equator, with a large number of religions and ethnic groups, Singapore belies at least three old-fashioned and recently occasionally rediscovered ideas about economic development: that the keys to economic success lie in the white race, in the Protestant ethic, and in a temperate climate.

In a few years Singapore went from being a poor and sleepy tropical port to becoming a powerhouse of wealth and technology. The occasion of the anniversary prompted comments on the reasons for its success.¹⁰ One reason cited was the ‘peaceful embrace of diversity’. Singapore’s ethnic and religious diversity is impressive. The goal of union in diversity is a much-used motto: ‘*E pluribus unum*’ is on the official seal of the United States. The related concept, ‘United in Diversity’ (*In Varietate Concordia*) – in a total of 23 languages – was adopted in 2000 as the official motto of the European Union, and is also the motto of Indonesia and South Africa. Yet, in the same year that Singapore celebrated its success, racial disturbances in the United States and a European Union torn apart by its common currency and by refugees from the de-industrialized or never-industrialized periphery called the practical execution of the ideal of combining diversity with unity into question. Again we are left with a gap between rhetoric and reality.

Singapore is a good example of how diversity can and should function. Paternalistic, some will say; but paternalism – the duty of the rulers to improve the lives of their citizens – was key also in the development of Europe. We may perhaps now see paternalism with a hint of nostalgia, as the *noblesse oblige* which was part of this paternalism slowly yields to social Darwinism and democracies appear to be weakened or fail under the impact of globalization and new technologies.

Arriving by boat from Indonesia to Singapore a few days after the devastating 2004 tsunami, one of the authors was asked by the taxi driver why he thought Singapore was saved from the disaster. The driver’s own answer was because in Singapore people from six different religions were praying to the same God. A key to understanding this, as we have emphasized in this volume, is that ‘the mode of production’ heavily influences religious practices. Muslim religion in the Singapore setting differs from the same religion in a nomadic desert setting. And when the pie is shrinking – as presently in the United States (US) and the European Union (EU) – religions under different modes of production more often than not lead to ethnic hatred rather than to tolerance. Wars can be clashes between aspiring industrial nations, like WWI and WWII, but they can equally

¹⁰ http://www.huffingtonpost.com/nathan-gardels/weekend-roundup-78_b_7957602.html.

well be clashes between religions based in different modes of production, industrial and post-industrial, as in the case of Europe today.

Kishore Mahbubani, Dean of Singapore's Kuan Yew School of Public Policy, mentions meritocracy, pragmatism and honesty as Singapore's key success factors. Meritocracy was also the feature which most impressed the Europeans about China during the time of China's secular decline from the 1500s onwards, and honesty was certainly also part of the same Chinese ethics. Meritocracy and honesty accompanied the sharp relative and absolute decline of China.¹¹ Why do meritocracy and honesty sometimes accompany decline, and sometimes – as in Singapore – spectacular growth?

For Graham Allison, Director of the Belfer Center for Science and International Affairs, Harvard Kennedy School, 'Singapore Challenges the Idea That Democracy Is the Best Form of Governance.' (Allison 2015). For Ali Wyne, of the same institute, Western democracy could learn two things from Singapore's success: the importance of quality leadership based on merit and the lack of ideological predisposition in tackling problems (Gardels 2015).

In power for 31 years, longer than any other Prime Minister, Singapore's leader Lee Kuan Yew (1923–2015) is history's latest example of the enlightened despots – from Ernst der Fromme in Saxe-Gotha to Otto von Bismarck – who led Germany, and also the rest of Europe, through what Albert Hirschman (1958) called 'multidimensional conspiracies in favour of development'. It should be obvious that such developmental conspiracies differ significantly from waiting for an invisible hand to act, but neither in present economic theory nor in present political discourse – still organized around a Cold War understanding of the world – is it clear what this conspiracy consists in.

The analysis of Kishore Mahbubani, speaking from the vantage point of Singapore, of what went wrong with the West is worth attending to:

The world is entering a new era, an era marked by two major changes. The first is the beginning of the end of Western domination – not the end of the West, though. The second is the Asian 'Renaissance', because the 21st century will be the century of Chinese and Indian economies. This is a Western financial crisis because the problems are the results of Western leaders' failure to understand that they faced a new competition. Western minds couldn't think that other societies were becoming more successful than they. People in the US and the EU live beyond their means. Does Western wisdom say 'keep borrowing' despite mounting budget deficits? The West has to 'relearn' Western wisdom from the East.

Asian societies are doing well (today) because they understood and absorbed the main pillars of Western wisdom, including the market, science, education and rule of law. But Western societies are gradually walking away from these pillars.¹²

The literature on the problems and decline of the West is already vast and growing, and in the English-language literature the word 'great' – once reserved for a handful of events like the 'Great Depression' or the 'Great Irish Famine' – is very frequently used to describe the changes that are taking place.

Kishore Mahbubani himself has contributed to this, the 'great one-thing-or-the-other' literature, with *The Great Convergence: Asia, the West, and the Logic of One World*

¹¹ This is argued in Reinert and Xu (2013).

¹² http://www.chinadaily.com.cn/opinion/2010-12/23/content_11742747.htm.

(2013). David Stockman, once White House Office of Management and Budget director in charge of ‘Reaganomics’ – also called supply-side economics and ‘voodoo economics’ – is surprisingly candid in his huge volume *The Great Deformation: The Corruption of Capitalism in America* (2013). Supply-side economics brought back what Schumpeter labelled ‘the pedestrian view that it is capital per se which propels the capitalist engine’ (Schumpeter 1954, 468). This theory justified tax cuts for the rich – the 1 per cent – as an engine of growth, whereas what actually happened was that the concurrent destruction of demand among the rest (the 99 per cent) killed off investment and led the rich to seek revenue in what was often financial speculation: instead of making money from the production of goods and services, increasingly money was being made in schemes that never left the financial sector.

In *The Great Degeneration: How Institutions Decay and Economies Die*, economic historian Niall Fergusson (2011a) roots his gloom in the current economist fashion that everything not fitting into mainstream analysis is put into a black box labelled ‘institutions’.¹³ On the eastern side of the Atlantic we have *The Great Eurozone Disaster: From Crisis to Global New Deal* by Heikki Patomäki (2013) and *The Great European Rip-Off: How the Corrupt, Wasteful EU is Taking Control of Our Lives* by David Craig and Matthew Elliot (2009).

Times of crisis tend to increase inequalities, so we have *The Great Divergence: America’s Growing Inequality Crisis and What We Can Do About It* by Timothy Noah (2012) and *The Great Risk Shift: The New Economic Insecurity and the Decline of the American Dream* by Jacob S. Hacker (2008). On the European side we have Alex Brummer’s (2010) *The Great Pension Robbery: How New Labour Betrayed Retirement* and Richard Brooks’s (2013) *The Great Tax Robbery: How Britain Became a Tax Haven for Fat Cats and Big Business*.

Marxists convincingly say that those few who get to Volume 3 of *Das Kapital* find an excellent explanation of financial crisis, so it is indeed useful to bring old perspectives back, as in Michael Roberts’s (2009) *The Great Recession: Profit Cycles, Economic Crisis. A Marxist View*. An economy out of balance requires *The Great Rebalancing: Trade, Conflict, and the Perilous Road Ahead for the World Economy* by Michael Pettis (2013). Debts have grown too much, so there is obviously time for *The Great Deleveraging: Economic Growth and Investing Strategies for the Future* by Chip Dickson and Oded Shenkar (2011). Speculation is clearly part of the crisis, so we have a timely republication from the last depression in 1932: Aaron M. Sakolski’s (2011) *The Great American Land Bubble: The Amazing Story of Land-Grabbing, Speculations, and Booms from Colonial Days to the Present Time*.

A self-help book in the ‘great’ literary genre has been around for some time: *The Great Reckoning: Protect Yourself in the Coming Depression* by James Dale Davidson and Lord William Rees-Mogg (1994). Urbanist and trend-chaser Richard Florida presents us with *The Great Reset: How New Ways of Living and Working Drive Post-Crash Prosperity* (2010). And, to add to the problems, Paul Gilding (2011) points to *The Great Disruption: How the Climate Crisis Will Transform the Global Economy*.

All these volumes on the ‘great’ changes capture and hold on to a facet of reality.

¹³ We shall return to this later in the Epilogue.

However, a better interpretative angle in our opinion proceeds from an understanding of the reversal of the mechanisms that were once harnessed successfully by the West, and described in the first chapters of this book, as well as in Kishore Mahbubani's remarks at the start of this section. His analysis, that the West seems to have lost its previously successful approach, is in our view both correct and important.

Present mainstream economics, essentially based on the economics of Adam Smith (1776) and David Ricardo (1817), was written from a perspective supporting the English Empire and perfected by Ricardo's 'comparative advantage'. Its main tenet is that it would be in the interest of all if every nation stuck to the economic activity at which it was least bad. Later – when the European continent and North America had industrialized with very visible hands against the recommendations of Smith and Ricardo – these countries also took over the Smithian–Ricardian position towards the rest of the world.

In short, the West lost the Renaissance and Enlightenment perspectives described in Chapter 1 of this volume, and with them the key success factors producing growth and welfare. The West came to believe in its own propaganda: theories originally made to keep the colonies poor boomeranged and backfired, leading to the present dystopia.

UNREALISTIC UTOPIAS THAT BOOMERANG AS THE CURSE OF EUROPE AND THE WEST

The naive optimism of 'laissez-faire' and the childish and frivolous appeal to revolution, the naive hope that the tyranny of the proletariat would lead to world happiness, increasingly showed their real nature, they were twins of an ahistorical rationalism . . . The period 1870–1890 led to the theoretical and practical bankruptcy of both the old schools. (Gustav Schmoller, German economist, Inaugural speech as Rector of the University of Berlin, 1897)

Austrian–Swiss economist Felix Somary (1881–1956) made the perceptive observation that all big universalist projects of Europe have boomeranged: the Crusades brought about the fall of Constantinople and the loss of the Eastern Roman Empire; aspirations of religious tolerance suffered the indignity of centuries of religious wars (including anti-Semitism); and the French Revolution ended in four generations of dictatorship (Somary 2010, 18–19). Today we can add – in the spirit of Somary – that the lofty ideals of the European Union project resulted in countries divided by a common currency, while the United States is faced with falling real wages and a rapidly dwindling middle class.

Gustav Schmoller (1828–1917) was by far the most influential German economist of his generation. What is particularly worth noting here is that the 'ahistorical twins' – communism and Manchester liberalism (today's neoliberalism) – are both 'cosmopolitical' schools. Both schools imagined the role of the state as very limited; also Marxism saw the state as necessarily 'withering away'. The fall of the ahistorical twins that took place from 1870 onwards brought about a degree of nationalism. In most countries this was a fairly healthy form of nationalism. Only in Germany and Italy – the two last countries in Europe to be unified – did this twentieth century nationalism take an ugly path.

Interestingly enough, David Ricardo – who again is seen as the founding father of formal economics – from the 1870s on came to be vilified as the spiritual father of these

irrational twins, of both communism and what we today call neoliberalism. His simple modelling of world trade as the barter of qualitatively identical labour hours opened the way for economics as a *Harmonielehre*, as a system creating automatic harmony (later called ‘factor-price equalization’; Samuelsson 1948, 1949). David Ricardo’s labour theory of value also created the foundation stone for communism.

The criticism just mentioned, which Gustav Schmoller voiced against David Ricardo and his theory at the end of the nineteenth century, could also be voiced against mainstream economics today. A key problem is that this theory operates at a level of abstraction too high and too decontextualized to give meaningful recommendations. At around the same time, English economist Herbert Foxwell said about his fellow countryman Ricardo: ‘The fact seems to be that, after the appearance of Ricardo’s *Principles*, the economists were largely given over to sterile logomachy [that is, disputes about words, controversy turning on merely verbal points] and academic hair-splitting’ (Foxwell 1899, p. lxxii).

As already mentioned, it was Foxwell who spelt out the danger of what Schumpeter later labelled the ‘Ricardian Vice’ in economics:

Ricardo, and still more those who popularised him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis in social speculations, from the failure to appreciate the limited applications to actual affairs of a highly artificial and arbitrary analysis. His ingenious, though perhaps over-elaborated reasonings became positively mischievous and misleading when they were unhesitatingly applied to determine grave practical issues without the smallest sense of the thoroughly abstract and unreal character of the assumptions on which they were founded. (Foxwell 1899: xli)

We shall later see how Milton Friedman (1953) reintroduced the Ricardian Vice as the basis for neoliberalism. To this should be added the ‘Krugmanian Vice’, after Paul Krugman: developing more realistic theories – like Krugman discovering the fundamental difference between increasing and diminishing returns – but refusing to apply them in real-world policies. The combination of these two vices has made economics ideologically very malleable according to demand; a point recently made by economist Paul Romer whose contributions are described later in this chapter.

This criticism fits today’s mainstream economics just as well as it fitted Ricardian economics in the late 1890s. Since then, communism and Manchester liberalism have represented Europe’s ideological counterpoints, and they did so for about 140 years until the 1989 fall of the Berlin Wall. At that point – the logic seemed to go – communism lost and the Manchester liberalism, under the new name of neoliberalism, had won. It is, however, important to note that the two political extremes of communism and neoliberalism are both cosmopolitical theories that reduce or totally eliminate the role of the nation-state. In line with this, 1989 was – as the literature told us – not only *The End of History* (Fukuyama 1992) but also *The End of the Nation State* (Ohmae 1995). Thus the fall of the Berlin Wall led to a time of intellectual hubris and triumphalism. Since one of the ahistorical twins had died in 1989, the conclusion was hastily – and illogically – drawn that the other ahistorical twin, now in the guise of neoliberalism, had won. But again it is important to note that both twins represented the cosmopolitical view, and that the nationalistic political horrors of the 1930s were a reaction to both these cosmopolitical

theories (communism and Manchester liberalism). This time around not only nation-states, but also religion, stand in the way of the neoliberal cosmopolitical utopia.

As the number of refugees from de-industrialized and war-torn countries – plagued by religious extremism – overwhelm Europe, we seem to have totally unlearned the Enlightenment wisdom quoted in the Introduction: ‘From manufacturing you may expect the two greatest ills of humanity, superstition and slavery, to be healed’ (Galiani 1770, 121). When manufacturing dies we see this process in reverse: a rebirth of superstition and slavery. Or to use the terminology of Max Weber, the *Entzauberung* (de-mystification) of society gives way to a *Wiederverzauberung* (re-enchantment). Western dreams of ‘spontaneous order’ if only ‘evil dictators’ were removed – based on economic theories in fashion – proved instead to produce ‘spontaneous chaos’ of a seemingly very durable kind. We do risk creating a rootless ‘army of the unemployed’, but with no Karl Marx scaring the capitalists into action, the likely result is a slow transition into a kind of post-industrial feudalism as discussed in this chapter.

On the ruins of two world wars, about 70 years ago, Europe embarked on a long road to integration. The process was built on strong idealism, and for decades there was little doubt that the process was very successful and that, as a consequence, the EU was seen as simultaneously creating peace and economic prosperity under a process of economic and social convergence. ‘The incoming tide lifted all boats’, as the saying goes, and the projects and processes met with little political opposition.

At the time of writing in spring 2016, the European project may appear dystopian, though there seems to be disagreement as to which brand of dystopia one should invoke for the present predicaments. Again, an overdose of supranational cosmopolitanism, this time both globally and inside the European Union, has caused protests. Game-theorist turned Finance Minister of Greece Yanis Varoufakis sees the EU as a case of Jean-Jacques Rousseau’s ‘stag hunt dilemma’, where the different hunters risk starving one another for the pursuit of a humble hare because they fail to coordinate themselves in the pursuit of the worthier hunt. For *Financial Times* editorialist Wolfgang Münchau the EU member states are an illustration of Mancur Olson’s *The Logic of Collective Actions*. As argued by the US economist in his 1965 book, vested organized interests are better at working the system than large collectives. For Münchau this failure to act can be seen in all the most urgent EU matters, from banks to sovereign debt to refugees.

Those who oppose present European Union policies now hypothesize fiscal colonialism¹⁴ and ‘Latin-Americanization’ of European countries.¹⁵ Others see the present crisis as the result of a secular tension between capitalism and democracy, whereby the present regime of fiscal consolidation is the most recent episode of a drama in which the fiscal states become debtor states, hostage to globalized markets, and the citizens lose all chances to influence a conflict which develops on a global scale between financial markets, international organizations and states. In this scenario the European Union becomes an executive federalism: ‘a reconstitution of capitalist democracy in Europe in

¹⁴ An expression used by Philippe Legrain, a former economic adviser to the European Commission President; see http://www.nytimes.com/2014/04/22/opinion/euro-zone-fiscal-colonialism.html?_r=0 (accessed April 2014).

¹⁵ See Reinert and Kattel (2004), and Reinert (2011). For the Baltic case see Reinert and Kattel (2014).

the sense of a solidification of the results of three decades of economic liberalization'.¹⁶ Whether this should lead to the dissolution of the European project or to its completion is the subject of a heated debate between Wolfgang Streeck and Jürgen Habermas.¹⁷ But if we fail to understand the mechanisms which at present increase the gap between the core of the EU and its economic periphery, how can we solve the underlying problems?

Other scholars share a more optimistic view. Jeremy Rifkin¹⁸ sees the internet of things as harbingering a new era of growth: the shared economy. Brynjolfsson and McAfee (2014) are confident that a 'beautiful partnership' can include the intuition and creativity of humans and the high routine processing, repetitive arithmetic and communication abilities of computers. In France, Attali's *Positive Economy Manifesto*¹⁹ sees space for an unselfish economy. Progressive Economy, an initiative launched in 2012 to stimulate a debate on economic and social policy and to promote progressive thinking, held a successful forum in March 2014, enrolling Joseph Stiglitz.²⁰ Advances in information technology and robotics are already transforming the workplace, and even greater changes lie ahead. Elliott (2014) looks at what the next two decades might bring. According to Steele (2014), what the world needs right now is the restoration of trust collapsed by rampant corruption at all levels of government and representation, and this can be achieved by a grass-roots movement for collective decision-making based on open source everything: 'The open source ecology is made up of a wide range of opens – open farm technology, open source software, open hardware, open networks, open money, open small business technology, open patents – to name just a few'. Steele, a former US Central Intelligence Agency (CIA) officer, sees a revolutionary tipping point as being very close.²¹ It only needs a trigger, he says; a Tunisian fruit seller, as was the case for the Arab Spring.

But, if in the past a key mechanism for economic growth has been the substitution of labour for capital, as a result of the ever-increasing price of labour compared to that of capital, how are we going to replicate the pattern of growth we had if wages are falling? We probably fail to see the role of imperfect competition in the labour market, assisted by strong unions, as a key to fast growth under equity. The ideological tension between Schmöller's ahistorical twins – communism and Manchester liberalism (neoliberalism) – created strong unions, and therefore costly labour, starting in the late nineteenth century and, particularly, in the decades after WWII. The question is whether we can recreate

¹⁶ The point is made by Wolfgang Streeck (2014), author of *Buying Time: The Delayed Crisis of Democratic Capitalism*. See also 'The Crises of Democratic Capitalism', <http://newleftreview.org/II/71/wolfgang-streeck-the-crises-of-democratic-capitalism> (accessed May 2014).

¹⁷ A full rendition of the terms of the debate is available online at http://www.india-seminar.com/2013/649/649_jurgen_habermas.htm (accessed May 2014).

¹⁸ See Rifkin (2014). People and communities are at the heart of this new economic paradigm, building the collaborative economy where consumers have been replaced by 'prosumers'.

¹⁹ The Movement for a Positive Economy is a platform to develop relationships and create knowledge about an economy that seeks more than profit; see <http://www.lh-forum.com> (accessed April 2014).

²⁰ See <http://www.progressiveeconomy.eu> (accessed April 2014).

²¹ 'The preconditions of revolution exist in the UK, and most western countries. The number of active pre-conditions [*sic*] is quite stunning, from elite isolation to concentrated wealth to inadequate socialization and education, to concentrated land holdings to loss of authority to repression of new technologies especially in relation to energy, to the atrophy of the public sector and spread of corruption, to media dishonesty, to mass unemployment of young men and on and on and on' (Steele 2012).

this kind of wealth-creating mechanism, based on increasing capital intensity induced by increasingly expensive labour,²² under the present conditions.

The golden years of economic growth after WWII coincided with a huge expansion of the manufacturing sector. Centuries after it was first formulated – after the author had studied the wealth of Holland – *Petty's Law*²³ as regards sectorial growth of economies still seems to apply: initially agriculture is the dominant sector, then manufacturing grows fast, while in the last phase the service sector will grow at the expense of the two former. Given the important role of manufacturing as the key to economic welfare, as is argued in this volume, future growth is likely to be in the service sector and of the more ‘invisible’ kind (as when free Skype calls substitute expensive traditional transatlantic phone calls).²⁴ The largest potential for ‘traditional’ growth is clearly in the poor countries – where the production and consumption of manufactured goods are still weak – if they are able to re-create the type of conditions that dominated in the West after WWII.

THE HOARDING DYSTOPIA: FINANCE IN CHARGE, NOT PRODUCTION

And therefore so much of them ought not to be allowed to be applied to other uses that there should not be enough left for money. It was this consideration that led Theodoric, King of Italy [493–526], to order the gold and silver deposited according to pagan custom in the tombs, to be removed and used for coining for the public profit, saying: ‘It was a crime to leave hidden among the dead and useless, what would keep the living alive’. (Oresme 1956 [1356])

A key element in Western culture has been the prevention of hoarding; in other words, making sure money was circulating, not idle. The quote from fourteenth-century monetary theorist Nicolas Oresme testifies to the importance of keeping money in circulation in order to keep the real economy going. An early expression of it is in the Bible (Matthew 25, 14–30) where servants are given money (talents), and the servant who has simply buried the money, instead of putting it into circulation, is punished.

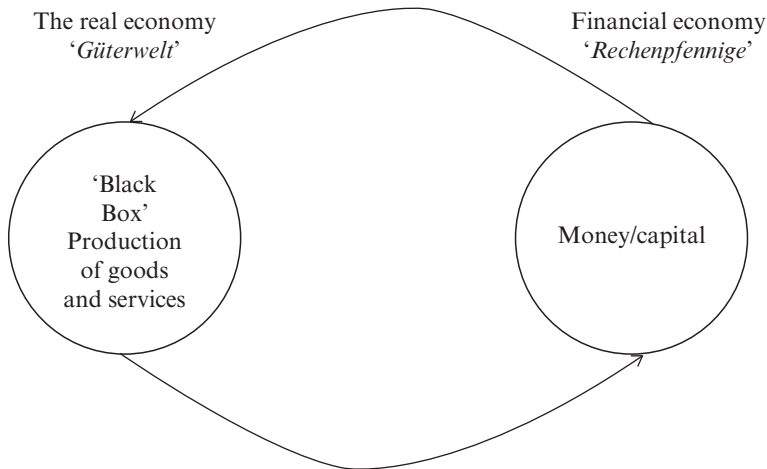
An important element in German-language economics has been the separation of the ‘financial economy’ from the ‘real economy’. We find this from Marx on the left of the political axis to the conservative Schumpeter on the right. Figure 40.2 renders Schumpeter’s idea of separating the money (*Rechenpfennige*, accounting units) from what you can buy for money in the real economy (*Güterwelt*, the world of goods and services).

In good times the financial economy serves as scaffolding for the real economy, a ‘bridge in time’, as Keynes (1982 [1933], 236–237) put it. If allowed to grow in ways that do not positively impact upon the real economy – by making money on money without going through production in the real economy – the financial sector will become like a parasite that grows at the expense of the real economy. Since the times of Hammurabi, 1792 to 1750 BC, societies which survived have managed to cancel unpayable debt (for a discussion of imbalances with the financial sector, see chapter 27

²² For a discussion of the role of expensive labour and high inflation in creating wealth, see Reinert (2014).

²³ Named after English economist William Petty (1623–1687).

²⁴ For a discussion of ‘invisible growth’ see Reinert (1994).

The Circular Flow of Economics*Notes:*

Güterwelt = the world of goods (and services), *Rechenpfennige* = accounting units.

The EU solution to the financial crisis has been to create more ‘accounting units’, inflating the size of the financial sector, but – through austerity – preventing these newly created accounting units from reaching the real economy in the form of increased demand for goods and services. In this way the financial economy goes from working in symbiosis with the real economy into being a parasite decreasing the size of the real economy.

Figure 40.2 Separating the real economy in a Schumpeterian fashion

in this volume). Bankruptcy, like bookkeeping, was a necessary invention in the early centuries of capitalism. At the moment the combination of printing new money, which creates assets in the financial sector but liabilities in the real economy,²⁵ coupled with austerity in the real economy, appears to be producing the situation that Lenin looked forward to: the last stage of capitalism will be when financial capital reigns – presumably because the real economy would then collapse under the weight of debt and underconsumption.

Also in this case there were warnings. Interestingly enough, Mario Draghi himself has issued a written warning against monetary power coming into the hands of the wrong people: ‘The currency . . . is one of those precious institutions which may become malignant if used to the advantage of organized groups’.²⁶

This is an exact description of what happened to the euro in the hands of Mario Draghi: the currency is used to the advantage of the financial sector – of high finance –

²⁵ This is one of the basic principles of double-entry bookkeeping, a system which macroeconomists rarely study.

²⁶ Draghi writes this in reference to economist and first President of Italy, Luigi Einaudi: ‘La moneta, nella sua visione [i.e. Einaudi’s], è una di quelle istituzioni preziose che possono però divenire perniciose se usate a vantaggio di gruppi organizzati’ (Draghi 2011).

and the detriment of the real economy. Germany's fear of inflation and that country's obvious short-term benefits from the present situation increase the power of the financial sector. What is now taking place is financial hoarding on a large scale. Huge amounts of money are essentially flowing inside the financial sector, not touching the real economy in other ways than shrinking it. In Europe the cases of Ireland, Cyprus, and Greece are examples of how the European Central Bank has failed to follow the traditional rules of bankruptcy, deciding in favour of the financial economy at the cost of the real economy (Reinert 2016). It is time to go back and read Nicolas Oresme and Martin Luther (Luther 2015, see also Rössner 2013) on the subject of hoarding.

THE POWER DYSTOPIA: THE DISAPPEARANCE OF MONTESQUIEU/GALBRAITH CHECKS AND BALANCES

At the origins of civilized societies lies a balance of power, in a modern context first theorized by Montesquieu (1748). We find this idea of checks and balances also in the Republic of Venice, and it was very prominent in the thinking of the US founding fathers as well.

In John Kenneth Galbraith's (1949) *American Capitalism: The Concept of Countervailing Power*, the massive powers of big business meet countervailing powers in big unions and citizens' organizations. Says Galbraith: 'It requires only a moment's reflection to conclude that a businessman with power neither to overcharge his customers nor to underpay his labour (and for similar reasons his other suppliers) has very little power to do anybody ill'. In this situation, Galbraith continues, government authority over the economy may be removed: 'In a state of bliss there is no need for a Ministry of Bliss' (ibid., 31).

However, with the weakening of labour unions and consumer power, and the state of bliss – a natural system of checks and balances – we shall have to bring back the Ministry of Bliss, in spite of all the shortcomings of governments, in an attempt to readdress the balance of countervailing powers. The disappearance of the experienced Weberian bureaucrat in favour of a system of new public management only reinforces this need.²⁷ We are again fighting those excessive market powers which we managed to rein in from 1870 to 1900.²⁸

In conclusion, the decision to put bankers like Mario Draghi in charge of the economy resulted from a lack of theoretical understanding of the huge imbalances which might be created if the real economy was sacrificed to the interests of banks. With a single-minded focus on preventing inflation at all costs, Mario Draghi was elected head of the European Central Bank for an eight-year period, from 2011 to 2019. It is tempting to compare the length of Mario Draghi's term, as a not publically elected *de facto* economic dictator, to the terms of elected officials of early democracies in the Italian city states. Officials of the *signoria* of Florence were elected for three months, and the ruling council was

²⁷ For a discussion of the problems of New Public Management in the context of development see Drechsler and Randma-Liiv (2015).

²⁸ What was then called Manchester Liberalism was in the United States reined in by the Institutional School of Economics, with Thorstein Veblen as a key figure. In Europe the German *Verein für Sozialpolitik* played a leading role in the same process.

so distributed between the professions that only one banker could be a member. Venice's Council of Ten (*Consiglio dei Dieci*) was elected for six months at a time.

THE DYSTOPIA OF VICIOUS CIRCLES: MORGENTHAU PLANS

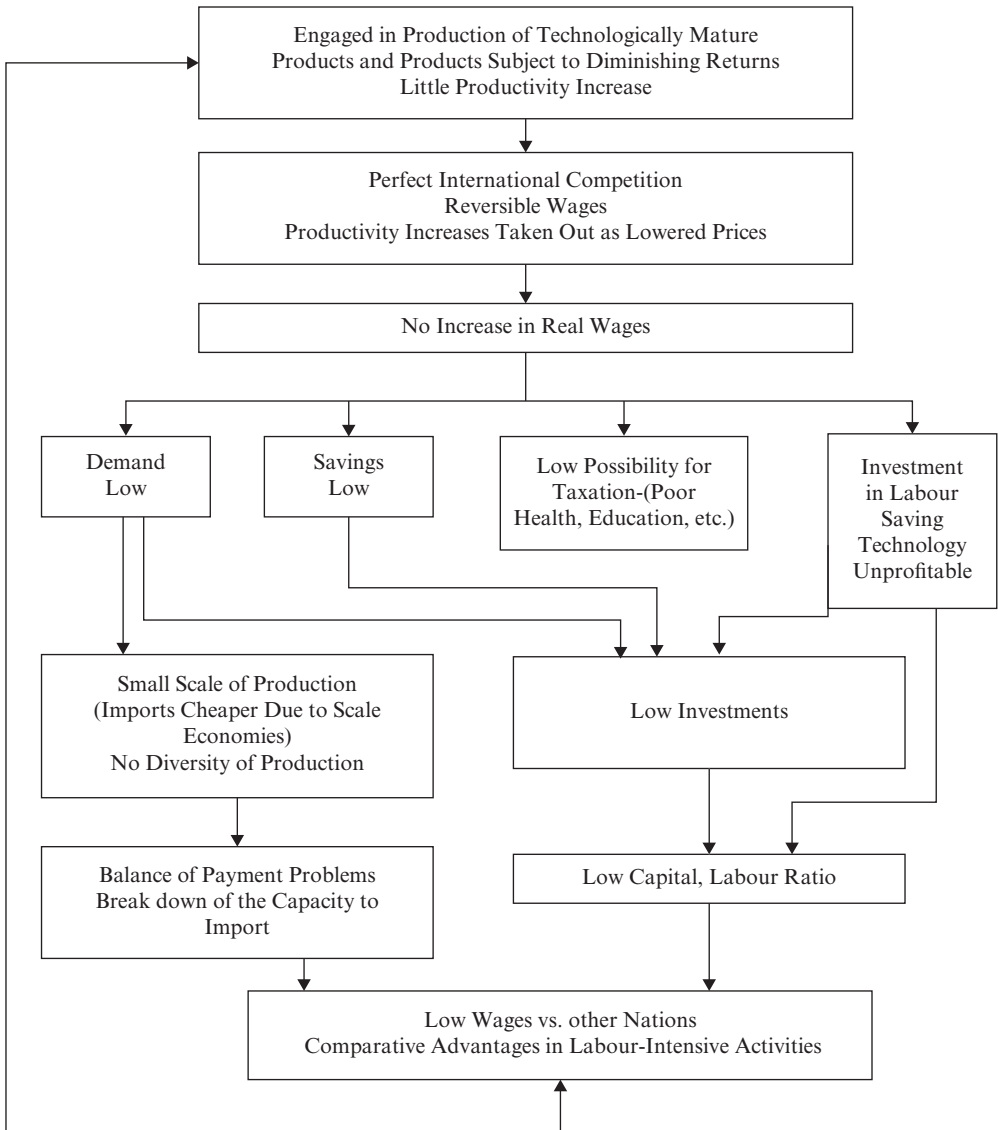
The warnings of a Marx, a Veblen, or a Mitchell²⁹ that economists were neglecting changes in the world gathering around them, that preoccupations with states of equilibrium led to tragic neglect of principles of cumulative change, went unheeded. (Arthur F. Burns, Chairman of the Board of Governors of the US Federal Reserve, 1970–1978, and Chair of the Council of Economic Advisors under President Eisenhower, 1953–1956; Burns 1954)

The equilibrium metaphor has blinded economics to all the forces that produce disequilibria. In this way economics developed into a system producing an illusion of 'spontaneous order', of automatic economic harmony. The quote above from Arthur F. Burns (1904–1987) is remarkable. It shows us that once presidential advisors were also intellectuals, and that a Chair of the Council of Economic Advisors at the peak of McCarthyism, and later President of the US Federal Reserve, could actually quote Karl Marx. It is also remarkable because it points towards an explanation of the present huge migratory flows: the cumulative downward economic spirals accompanying deindustrialization.

Figures 40.3 and 40.4 show – in a circular flow-chart form – the cumulative effects of the vicious circles of de-industrialization and poverty contrasted with the virtuous circles of economic development (also shown in chapter 1). The main point here is that advanced economic development is activity-specific, it can only occur in certain economic activities (Schumpeterian-type activities), and not in others (Malthusian-type activities). This is why, for a very long time, the term 'industrialized country' was considered synonymous with 'rich country'. The policies of the Washington institutions have since the late 1980s left this traditional understanding behind.

We seem to have totally unlearned that the refugee crisis in Europe after World War II was to a large extent solved by nourishing, rebuilding and protecting the industrial structure of the war-torn countries through the Marshall Plan. Reshaping the economic structure of their home countries made it possible for refugees to come back. No plans of the kind seem to exist for the present refugee crisis in Europe, previously discussed in this chapter. Comparing the post-war policies of the West as carried out in Iraq after 2003 – a shocking disregard for rebuilding the economic structure of that country – with those carried out in Germany and Japan after World War II – the Marshall Plan – gives us what is perhaps the most telling proof of the invisible hand of the market producing spontaneous chaos rather than spontaneous growth. In the long run the lack of attention to the productive structures of the countries in the Muslim world will cause increased human suffering, increased fanaticism, increased migration, and may indeed threaten world civilization as we have known it. The Muslim world needs a Marshall Plan – a plan that changes their economic structure – as does the majority of African nations.

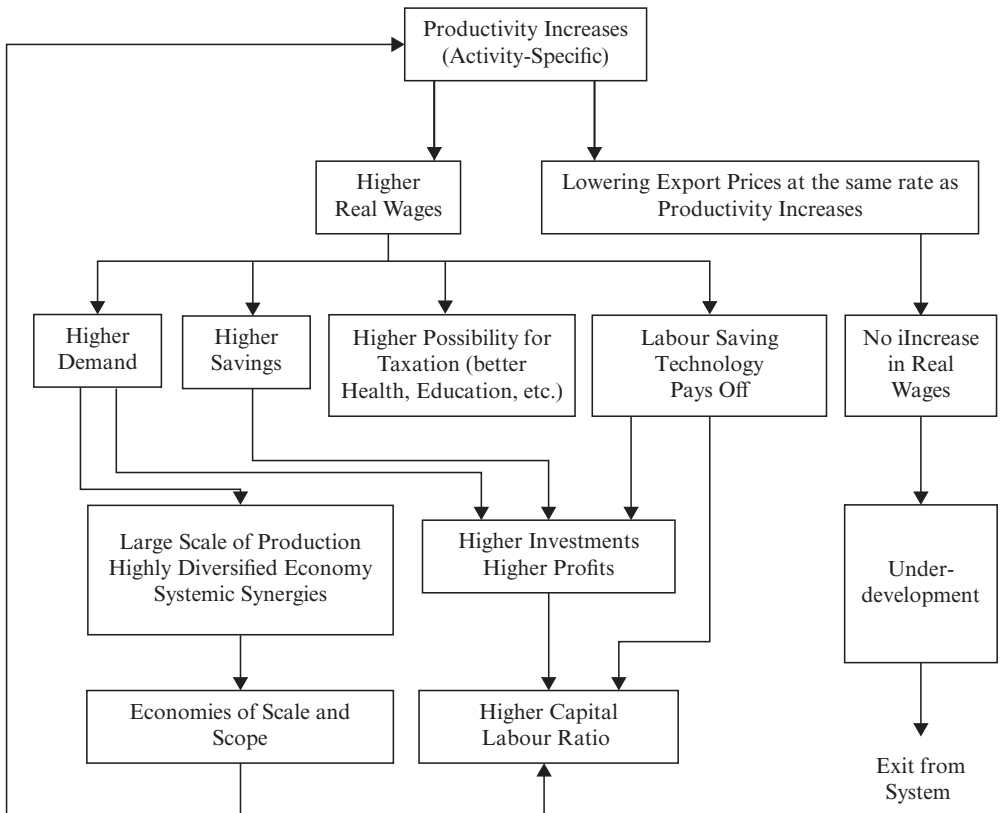
²⁹ Burns here refers to Wesley Clair Mitchell, founder of the National Bureau of Economic Research, and a student of Thorstein Veblen.



Note: It is futile to attack the system at any one point, for example, increasing investment when wages are still low and demand is absent. An instance of this is poor capital utilisation and excess capacity in Latin American LDCs.

Source: Reinert (1980, p.41).

Figure 40.3 The vicious circles of poverty: Morgenthau Plans



Note: In a closed system, with constant employment rate, the only way GNP per capita can grow is through the 'virtuous circle'. However, the system can be cut off at any one point; for example, if higher demand goes to foreign goods alone, the circle will break.

Source: Reinert (1980, p. 39).

Figure 40.4 The virtuous circles of economic development: Marshall Plans

Even in a more static system – as opposed to the dynamics illustrated in Figures 40.3 and 40.4 – there will always be a large number of low-skilled activities, void of any barriers to entry, that will consistently produce low wages. These activities represent the low-quality activities in the Quality Index of Economic Activities (Figure 40.5), fashioned on factors that are important in industrial economics (Reinert 1994). The core idea of colonialism was that the production of high-quality activities was not allowed in the colonies, while the key success factor of classical development economics was the opposite: the understanding that these high-quality activities needed to be spread to every nation (to every labour market).

The current fashion is to list the lack of openness of the industrialized countries towards agricultural imports from the Third World as one of the reasons why globalization causes poverty in some parts of the world. In other words, the problems are seen as

The Quality Index of Economic Activities

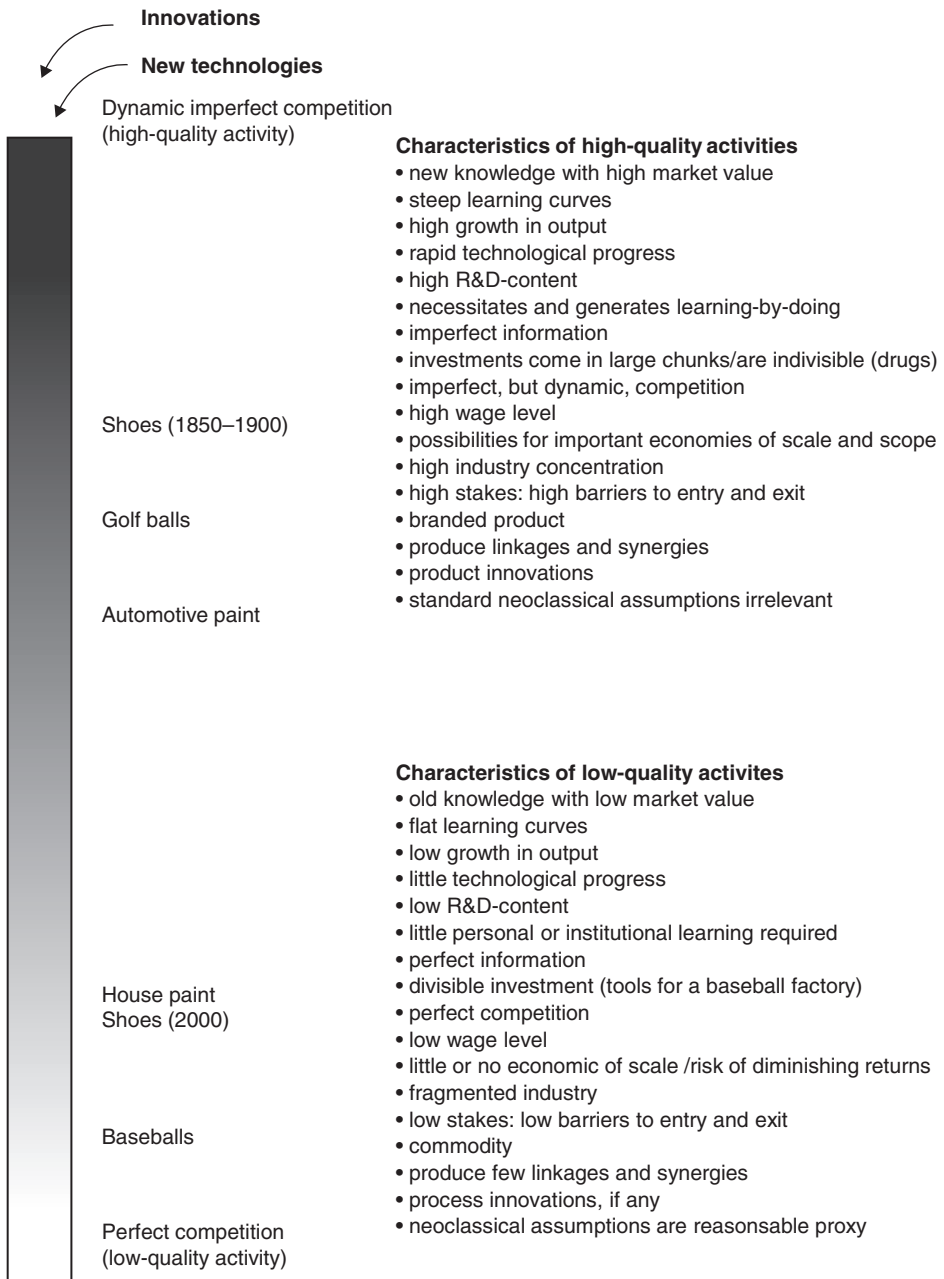


Fig 40.5 The Quality Index of Economic Activities

being created by a lack of openness to free trade. In our opinion, the historical record proves these assertions to be wrong. No nation has ever taken the step from being poor to being wealthy by exporting raw materials in the absence of a domestic manufacturing sector. Malthusian activities alone have never been able to, and will never in the future be able to, lift a nation out of poverty without the presence of a domestic manufacturing sector. The only results of any importance that will be achieved by freeing the imports of foodstuffs from the Third World to the First World are:

1. A destruction of First World farming and of the rural areas of the First World.
2. A change to industrialized farming in the Third World, where the income will fall to an extent that the local workers will not be able to afford to purchase the food they produce for the rich, and the natural resources will be overexploited with resulting environmental degradation. This is in essence a mechanism of subsistence at the natural wage level, as foreseen already by Malthus.

The only way to achieve a global trading system without hunger is to strike the following deal between the rich and the poor countries: the rich nations selectively target, nourish and protect some of their Malthusian activities (agriculture), whereas the Third World is allowed selectively to target, nourish and protect some of their Schumpeterian activities (industries and advanced services subject to increasing returns) while at the same time protecting their own food production and environment, all under a system of internal competition. This must be done under a system of regional integration of the Third World countries.

The present policy of blind globalization coupled with increasing 'development aid' is essentially a policy of applying palliative economics; economics that addresses the symptoms of poverty without at all attacking its causes. Instead, the essence of economic development is a violent structural change leading down steep learning curves towards increased productivity. Providing a better water supply to subsistence agriculture is purely a palliative medicine, unrelated to the process of economic development in the real sense.

Today there are, broadly speaking, only two possible solutions to solving the increasing poverty problems caused by globalization:

1. We can globalize the labour market, the only main institution that is not yet globalized, by allowing all the poor to move where the 'Schumpeterian' economic activities are located. This will lead to an unprecedented exodus, to enormous social problems, and to a neoclassical-type 'factor-price equalization' where world wages will tend to be equalized downwards. All will tend to get equally poor.
2. We can follow the nineteenth- and early twentieth-century path taken by all the presently rich countries – of which Australia is an excellent prototype – by creating national Schumpeterian sectors which initially are not competitive in the world markets, and slowly over time letting the economy 'graduate' to compete on the world market. This is the only way to create dynamic 'factor-price equalization' upwards. Only in this way can we make the poor countries into middle-income countries.

In our opinion, option two is the only viable solution. Since close to 1 billion people do not get sufficient nutrition, a mass migration of a large number of the world's poor to the

rich countries entails an overwhelming likelihood of a factor-price equalization downwards: that the wages in the First World will fall towards the wage level of the majority of the world's population, close to subsistence level. Thus the world risks being caught in an irreversible market-driven underconsumption equilibrium.

THE DYSTOPIA OF STANDARDIZATION: KILLING DIVERSITY

How fortunate we are in this regard that there are still so many distinct and separate German states! What is so often said to be our disadvantage can perhaps work to our advantage in this important national matter. Perhaps imitation on the part of the majority, and the desire to get ahead of the others, will bring about something that the tranquil self-satisfaction of the individual states would not; for it is plain that the one state among all German states that makes a start with this will gain a definite lead in the respect, love, and gratitude of all; it will be the supreme benefactor and true founder of the nation. It will give the others courage, provide an instructive example, and become their model; it will remove all reservation that they might still have; it will be the source of the first teachers and the first textbooks, upon which the others may draw; and whichever state becomes the second will have the reputation of having been second. (Johann Gottlieb Fichte (1762–1814), *Addresses to the German Nation*; Fichte 2013 [1807/1808])

While Johann Gottlieb Fichte above emphasizes the importance of diversity, a key characteristic of the twentieth century was the opposite: standardization. The need for standardization was brought about by industrialization: lowering costs was intimately tied to standardized mass production. The use of standardized and interchangeable parts had already started with gun production during the US Civil War, but the real starting point for mass production was Henry Ford's assembly line. 'Any customer can have a car painted any colour that he wants so long as it is black' was Ford's message in 1909. The information technology (IT) revolution in the 1990s made more flexible production possible, and the need for and cult of 'sameness' diminished.

As noted in the introduction to this volume, neoclassical economics – and therefore also the economic logic behind the European Union – came to conform to the standardization zeitgeist: as economics Nobel laureate James Buchanan (1979, 231), wrote: 'Any generalized prediction in social science implies at its basis a theoretical model that embodies elements of an equality assumption. If individuals differ, one from the other, in all attributes, social science becomes impossible.' Faced with this trade-off between 'science' and 'diversity', neoclassical economics chose the 'scientific' path, by in effect making all human beings (perfect information) and all economic activities (perfect competition) qualitatively alike. The basic metaphor of economics became equilibrium, taken from the physics profession of the 1880s.

A great intellectual mystery of the twentieth century is how, on the one hand, standardized mass production and the concomitant growing importance of increasing returns to scale under imperfect competition came to dominate economic life in the rich industrialized countries, while on the other hand, sometime in the 1930s, increasing returns to scale – the very basis for standardized mass production – was thrown out of economic theory because it was not compatible with equilibrium. The logical thing to do would have been to throw out equilibrium because it was not compatible with the most prevalent of all economic 'laws' at the time: increasing returns. The 1988 Cecchini report,

which made the theoretical case for the European single market, was heavily influenced by the importance of increasing returns to scale. Around 85 per cent of the benefits from the single market were seen to come from this factor alone.

The trend towards standardization and ever-increasing size of firms and organizations was very much the reality of the twentieth century, but not in economic theory. A theory which assigned increasing returns and imperfect competition to industrial activities and diminishing returns and perfect competition to agriculture and mining would have contradicted the overriding paradigm of the need for free trade. As discussed elsewhere in this volume, that understanding – which in practice had been basis for most of European history – slowly died out after its extremely successful reintroduction with the Marshall Plan.

In 1982 two US economists, Richard Nelson and Sidney Winter, published a volume which would bring back Fichte's perspectives on the role of diversity: *An Evolutionary Theory of Economic Change*. In the spirit of Schumpeter, Nelson and Winter base their economics on metaphors from biology: the market – rather than merely a machine setting prices – becomes a laboratory where different products and different solutions compete; innovations become the equivalent of nature's mutations; and the end-point is not an equilibrium, but rather an open-ended development where 'optimality' (from whatever viewpoint) is not secured or perhaps not even likely. Note in this respect the similarity with evolutionary biology's theory of punctuated equilibria. In this setting, diversity becomes an important asset: the more different approaches become available, the better the outcome is likely to be. This approach was taken over by an Organisation for Economic Co-operation and Development (OECD) programme, Technology and the Economy, in the early 1990s (OECD 1992), but in terms of practical influence over the policy of the European Union the influences of the neo-Schumpeterian wave boiled down to 'a laundry list of good intentions' (Reinert 2006a), not capturing the key differences between economic activities and, consequently, not the importance of economic structure. Thus today's European Union came to resemble Immanuel Kant's (1724–1804) cosmopolitan federation rather than the Fichtian ideals.

In his opposition to Kant, Fichte did not see cosmopolitanism as necessarily being the optimal solution. 'Fichte sought to establish that there were no inherent limits on the extent to which a world of multiple states would come to approximate his humanitarian ideal, despite remaining a world of states' (Isaac Nakhimovsky in the introduction to Fichte 2013 [1807/1808], xvi). With an asymmetrical economic integration tearing the union apart, Fichte's perspective is certainly worth reconsideration in Europe.

THE DYSTOPIA OF TECHNOLOGICAL RETROGRESSION

Technological retrogression results from producers' adoption of technologies that reduce labour productivity by lowering the capital–labour ratio. This development – the exact opposite of the vision of higher automation and robots that is discussed elsewhere in this chapter – may cause entire subsectors to become retrograde, leading to market withdrawal and production for subsistence. The 'theory of technological retrogression' (Endresen 1994) seeks to understand the technology component of decline, trapping societies in cumulative downward spirals of lowering income, lowering capital accumulation and

low investment. Historically, technological retrogression has been associated with poor countries and diminishing returns in agriculture, fishing and mining, as when destitute workers with primitive tools work mines where modern technology can no longer mine profitably. What we observe now is that technological retrogression can be found also in rich countries and outside the raw material sectors. Reinert (2007, Chapter 5) discusses the economic mechanisms of primitivization also outside the raw materials sectors.)

Endresen (1994) provides an archetypal case of technological retrogression. For centuries Sri Lankan fishermen use sailing boats in their trade. At one point, bigger boats with inboard engines are introduced, and the most skilled fishermen – those trained in sailing – are recruited to the modern boats. A relatively long period of progress and prosperity follows, but then an increased price of oil dramatically reduces profitability. Boat owners try to ride out the storm, but gradually lose their crew members, who turn to traditional boats. However, sailing skills are lost. With the loss of sailing skills traditional deep sea fishing is also lost, and fisheries become an inshore activity based on the use of rowing boats. The inflow of labour to this inshore fishing results in resource depletion. In this tale of technological retrogression survival is secured, but standards of living are severely reduced as resources are depleted. With technological retrogression – the return to less advanced technologies – it seems inevitable that labour will involve physical hardship, while the daily struggle to make ends meet and provide for children's education becomes harder. In short, labourers experience immiseration. Migration may provide an escape; and technological retrogression becomes reinforced where this option is lacking or perceived as fruitless. After all, Alfred Marshall, the founder of neoclassical economics, pointed to diminishing returns as 'the cause of most migrations of which history tells' (Marshall 1890, 201). Both for society and for individuals alike, these are situations of lock-in. The lock-in phenomenon raises several questions. What motivates technology choices that contradict the main thrust of economic history? What triggers such processes, and what are the contextual preconditions?

A major precondition of technological retrogression is lock-in of the producers in particular production systems and places. In some cases this may be a result of apparently 'voluntary' technological choices, as when the unemployed computer engineer in Greece or Spain returns to his grandfather's farm. In other cases retrogression seems to be forced on individuals by structural coercion. The latter may be desperate measures when other options are (or are perceived to be) non-existent. When in the case of voluntary retrogression there are other options, the producers may be said to have locked themselves into production systems of the past. From one point of view technological retrogression may appear as a desirable form of de-growth (D'Alisa, Demaria & Kallis 2014). But a future scenario of societal polarization emerges, 'idyllic', low-productive, old-fashioned producers with no market power at the one extreme, and hi-tech production units with huge market power, and the political power that comes with it, at the other. This invites reflections on the causal relationship between technological retrogression and socio-economic marginalization, and implicitly, socio-economic polarization and increased inequality. Furthermore, where technological retrogression involves return to organizational models of the past – like the neo-feudalist trend discussed in the next section – this affects the political leverage of labour and may reverse social progress. Clearly an economic theory postulating 'perfect competition' and 'the representative firm' – disregarding differences in barriers to entry and market power – is unable to

capture the qualitative differences between economic activities which in turn lead to measurable income inequalities.

The grandest perspectives within history and the social sciences concern the evolution of human society and the rise and fall of civilizations. Is it useful to discuss technological retrogression in terms of such grand narratives? We would then look for evidence of this phenomenon during periods when empires disintegrate and vanish, and during prolonged crises of societies. Grand narratives are more concerned with progress than with decline. In his *History of the Idea of Progress*, Robert Nisbet claims that between 1750 and 1900 the idea of progress 'reached its zenith in the Western mind in popular as well as scholarly circles. From being one of the important ideas of the West it became the dominant idea' (Nisbet 2009, 171). Progress provided the developmental context for ideas such as equality, social justice and popular sovereignty. Philosophers of that time – Turgot, Condorcet, Saint-Simon, Comte, Hegel, Marx and Spencer – saw history as a slow, gradual, but continuous and necessary ascent to some given end.

Grand narratives proclaiming progress as 'an inexorable march of mankind' (Nisbet 2009, 171) do not generally obtain the status of theory of social science, where researchers concentrate on contemporary issues and testable hypotheses. But social science abounds with grand narratives, whose concepts have become ingrained in our language, scientific as well as vernacular. In a historical perspective, post-modernists' proclamation of the death of grand narratives (Lyotard 1984) is very recent, and is at present marginalized by entrenched resistance of the prevailing modern order. What should be credited to postmodernists, however, is that their questioning of grand narratives has inspired a renewed critique of the idea of progress, hegemonic in Western thought for nearly 300 years. Progress is not something we think 'of' when discussing societal change; it is what we think, and this impairs our critical capacity to analyse it.

The periods of abrupt change are considered to be evidence of gradual emancipation of human agency, allowing history to jump forward. However, for our specific purpose, this stressing of what we may term 'contingency of progress' is important:

There is no necessity of progress, it is not pre-ordained that people will be willing and able to exercise their creative capacity. The constraining natural, structural, or historical conditions, or the suppressed motivations for activism . . . may prevent creativity from flourishing. And similarly, the process of cumulation, passing on of tradition may get disrupted, both at the biographical and at the historical level . . . In such cases, stagnation or regress rather than progress will be a likely result. (Sztompka 1990, 258)

The idea of progress is at the heart of modernization theory, where developmentalism dominates: every society progresses towards greater modernity. The classical economists, Adam Smith and David Ricardo, envisioned a future steady state. But they did not predict retrogression. Within neo-Marxist development thought, developmentalism has been questioned since the days of Paul Baran (1909–1964). Amin (1976) introduces the concept of retrogression in agricultural technique, inspiring our analysis of causes of decline. He describes a situation where modernization is reversed: average labour productivity of the production unit is lowered, and entails more men and less capital (Amin 1976, 206).

However, until now two different mechanisms have prevented this from happening in the West. First of all, since Western farmers are part of the same labour market as

industrial workers, there are limits to how large the income gaps between the two sectors could be even at times of negative growth. Secondly, generous subsidies to farming and guaranteed farm prices have prevented the negative processes anticipated by Samir Amin from taking place. Recent developments in Greece and Spain seem to move in a direction that may make Amin's prediction come true. It should be noted that policy, not 'the market', has prevented this from happening earlier.

Discussing regress, Sztompka (1990) notes, firstly, that individuals may be socialized into passivity, or harsh lessons from past failures can result in limited capacity for innovation. These are conditions which limit creativity. Secondly, the process of 'cumulation', passing on of tradition, may be disrupted, and therefore the transfer of human experience over time may be prevented. The role of institutions such as schools, churches and the media in preventing loss over generations may be crucial here.

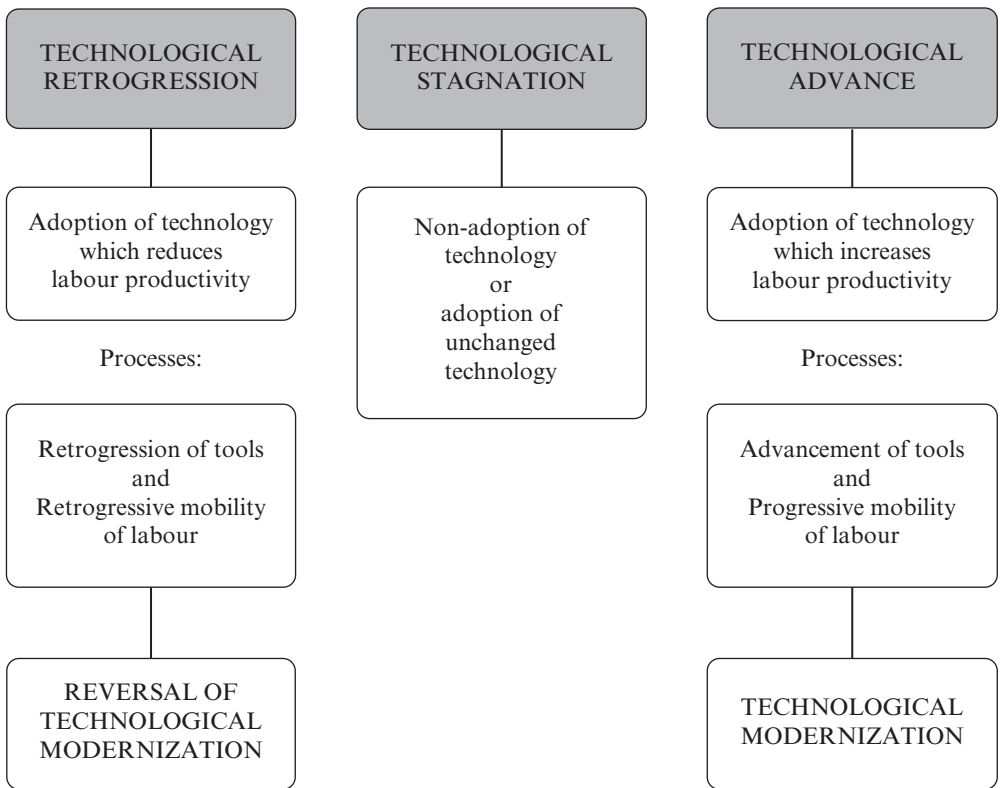
The dominant idea of progress hampers our ability to observe and conceptualize regress, reversal and retrogression. We therefore need to shed our 'progressive lenses' and to operationalize the concept of decline. The theory of technological retrogression is an attempt at constructing a testable theory of reversal of technological modernization. This theory has gained new relevance due to economic setbacks in Eastern Europe during the transformation to capitalism. In rural Western Europe, the relevance of the theory is linked to deindustrialization after the financial crisis (see Tregenna, Chapter 38 in this volume).

For Nisbet (2009), with the triumph of Christianity, a linear conception of change took over from ancient cyclical conceptions of change. With the Enlightenment the Christian linearity conception, which includes a prophecy of the 'end of time', waned and the modern secular conception of linearity came into being, together with the belief in the science-driven eternal progress of society. Since the Industrial Revolution, history can be read as a narrative of continuous scientific progress, carrying through every sphere of society, and nowhere has the idea of progress been more pronounced than in the narrative of technological change, mimicking 'old beliefs in the permanence of human progress' (Nowak 1990, 237).

An important descriptor of decline is the changes in the composition of gross domestic product (GDP) or the workforce according to economic sector. Here we confront our conceptions of societal evolution: a society that is predominantly agricultural is considered lower on the development ladder than industrial countries. Sejersted (1979) and others analyse economic growth during industrial transformation in terms of 'surplus of transfer', with a shift of labour from traditional to modern, from primary to secondary occupations. Consequently, a shift in the opposite direction, where labour flows into agriculture, would result in 'transfer losses'.

Figure 40.6 depicts a conception of technological change that caters for the possibility of decline. Technological retrogression is defined as the adoption of technology that reduces labour productivity. In this vision there are two levels of knowledge involved: knowledge linked to the immediate operation of a tool (the instruction manual), and knowledge on how production should be organized for tools to function.

'Retrogression of tools' in the figure refers to incidents where producers move; for instance, from tractor to horse. Technological retrogression may affect entire subsectors and cause market withdrawal and subsistence production. 'Retrogressive mobility of labour' refers to flows of labour from high-productive to low-productive industrial



Source: Endresen (1994).

Figure 40.6 Technological change, the concepts

activities. A viable hypothesis is that this occurs with informalization of economies: the factory closes down, and the workers survive with primitive tools in back yards and on the streets. The concept of retrogressive mobility of labour also covers counter-historical flows of labour from secondary industries to agriculture, resulting in transfer losses.

As already mentioned, our ideology of progress hinders our understanding of technological retrogression. To compound this difficulty, retrogression is also 'statistically hidden'. In statistics, technological modernization by some producers may outweigh retrogression and produce 'an aggregate illusion of stagnation'. Reconstruction of technological change therefore demands a methodological approach that enables the reconstruction of technological change and sectoral and geographical mobility over time (Endresen 1988).

Necessity, Choice and Profit Opportunity

What motivates producers to adopt technologies that lower labour productivity? Underlying causes may include structural coercion, ideological trends and profitability

considerations. Here ‘purpose’ or ‘justification’ describes what actors themselves express as being the reason why certain choices were made. If producers are forced to abandon modern technology and go for technologies that are inferior in terms of labour productivity, they face technological retrogression by necessity. But technological retrogression may be the result of a lifestyle choice, such as when the Amish adopt and preserve production equipment of the past, aiming to replicate the society of a bygone century. Beside motivations of necessity and choice there is a motivation of technological retrogression by profit opportunity. With costs of labour falling compared to the cost of capital, the substitution of capital with labour becomes profitable; instead of investing in machinery, cheap labour can be hired, and production becomes more labour-intensive. Cheap labour may lead to a change in technology. This motivation may become important during periods of economic recessions and political turmoil. Where there is oversupply of labour, wage levels may drop to what the most desperate of workers are willing to accept (Ricardo 1817); while in industrial societies, increased price of labour resulting from working class struggles has spurred the advance of technology.

Empirical Evidence of Technological Retrogression

The most thorough verification of technological retrogression is found in Endresen (1994), in her study of Asian fishing villages. In one case, retrogression was due to the price increase of imported inputs; in another it was due to the disastrous ecological effects of technological modernization. Both situations involved diminishing returns and a severe lock-in of primary producers caused by lack of diversification of the economy. The modern crewmen were the first to turn to traditional boats as a survival strategy, but this did not lead to a labour shortage on modern boats. In the societies in question, the labour supply was almost unlimited; workers were willing to work for very low pay. The owners of modern boats exhausted their capital funds before they finally gave up and went back to traditional technologies. However, the traditional sector they (re)turned to was not as productive as before: local knowledge such as sailing skills and old fishing techniques were lost during the modernization period. Harsh economic realities led to retrogression in these cases; thus it was retrogression by necessity.

There is historical evidence of retrogression in Europe. During financial crises in the eighteenth century as well as during the Great Depression in the 1930s, Norwegian fishermen had to move from modern boats to traditional ones, becoming less productive, and therefore they had to ‘struggle with oars and destitution’. In both cases, de-industrialization, capital shortage and lock-in were factors of explanation. Capital shortage during the latter period led to incidents of ‘primitivization’ (Bull 1988, in Endresen 1994, 236) in Norwegian manufacturing as well. Small apparel producers survived during the hard times by squeezing labour and reducing technology levels (Wicken 1982).

The results from a pilot study on technological retrogression and poverty in rural Russia (Tkach, Bogdanova and Endresen) are included in Papalexiou (2015). She concludes that ‘shock therapy’ (opening of the economy, liberalization, land reform) led to a sharp rise in the price of agricultural input factors, such as harvesters and cars. Food imports increased immensely and prices fell. At the same time, subsidies were removed, creating a squeeze preventing investments in machinery to secure efficient production.

Monoculture in large production units now exists side by side with many smaller farms with a multitude of types of produce, and rural poverty persists. But this small-scale agriculture does not constitute the modern, competitive farming that the reformers had in mind. It relies mainly on manual labour, and serves as a survival strategy in the absence of employment or income from the indebted agricultural collectives (Kalugina 2014, in Papalexiou 2015, 15).

The parallels with the case of the fishermen are evident: lack of diversification, lock-in, high cost of capital and capital shortage, and poverty trap. The technological choices made are good for the immediate survival of the producers, but less so for sustained growth and development. Unfortunately erroneous perceptions regarding rural poverty in Russia (such as reluctance on the part of villagers to change their way of life) echo the flawed explanation of 'traditionalism' used for the technological retrogression literature on the Asian cases.

Adding Decline to Schumpeterian Thought

The theory of technological retrogression contrasts progressive dynamics as developed by Schumpeter with retrogressive economic dynamics of technological change. We may observe Schumpeterian 'destructive destruction' in reverse.

Cast in Schumpeterian terms, technological retrogression may be considered the resurrection of 'dead' technologies which brings with it detriments to economic growth, and social and regional development (Endresen 1994). Thus, progressive Schumpeterian dynamics has an 'evil twin'; retrogressive dynamics is set in motion where (un)favourable contextual preconditions prevail. Producers, incapable of escaping crises through innovation, do not cease to exist (except, it seems, in economic theory). For the sake of short-run survival, they try many survival strategies, including technological retrogression, resulting in reduced labour productivity and economic decline. Both dynamics can be cast in Myrdal's (1957) terms of positive and negative 'cumulative causation', describing spiralling effects of economic upturns and downturns. Whereas cyclicity of capitalist economies is of major importance in Schumpeter's optimistic theory of technological progress, many different triggers are relevant in its retrogressive twin process: collapse of political systems, exploitation of labour, and ideological lifestyle trends.

A Dystopian Omen?

Should evidence of technological retrogression be considered dystopian omens? Yes and no. Yes, because it signifies a reversal of modernization that has meant increase in labour productivity, the historical way out of poverty for billions of people. Going for low-tech, labour-intensive production runs counter to what has created wealth since the agricultural and industrial revolutions began. However, negative effects for long-term growth are probably the least of the producers' worries when they make the decision to reduce labour productivity or move from urban to rural occupations. The motives are to be sought either in the need for immediate survival, or in a changed lifestyle, or in an accumulation strategy of capital owners. These categories may overlap: losing a job during a recession may spur lifestyle changes, as when the unemployed computer engineer returns to his grandfather's farm to survive.

There is a development quandary associated with the existence of both progressive and retrogressive outcomes of technological change. De-industrialization may lead to re-industrialization at a lower technological level, and such survival strategies can be interpreted as expressions of resilience. However, choosing technological retrogression comes with lower labour productivity, which in turn limits opportunities for capital accumulation. Throughout the history of economic prosperity, we find technological modernization at its core. Capital-intensive production units innovate their way out of recessions through technological progress, leading to virtuous spirals of enhanced productivity and growth. When producers resort to technologies that secure survival but decrease labour productivity, the possibility of capital accumulation diminishes, depriving economic actors of modernization as a route of escape from poverty. Vicious spirals of decline are formed, leading to social and economic decline, and entailing a marginalization of producers as well as an increased inequality. We may very well be on our way back into what early development economists referred to as ‘dual economies’.

THE DYSTOPIA OF NEO-FEUDALISM

The twenty-first century has been celebrated as a century of convergence, which could be achieved by means of three guideline elements: ‘creative healthy individuals, a sustainable planet and full global development’ (Perez 2013). Even a summary analysis reveals that in this century, as well as possibly in the next few centuries, the desired convergence – factor price utilization – is no more than an unusually unrealistic and naïve utopia. It is worth noticing that the idea of factor price equalization entered economics at a high point in the Cold War, during the communist blockade of West Berlin (Samuelson 1948 and 1949).

Advance in technology remains the driving engine of economic development, putting a very promising future within the reach of a large portion of mankind. More than three decades ago, Leontief (winner of the Nobel Prize for economics) said that ‘the role of humans as the most important factor of production is bound to diminish in the same way that the role of horses in agricultural production was first diminished and then eliminated by the introduction of tractors’ (quoted in Lanchester 2015).

But what happens in a reverse situation, if the tractor is replaced by the horse? This question is relevant to the economic processes that occurred in a large part of Central and Eastern Europe after the collapse of communism, and the answer resides in at least four mutually dependent drivers:

- the vulnerability of economic development, aggravated by a utopic ideology; communist society reached its limits after exhausting its own resources and after the collapse of its own economic mechanisms in the face of the new challenges of the contemporary world;
- the incomplete type of economic education, by means of the elimination of private property and the free market from the equation of development;
- the degradation of the human being, in collective-type dictatorial regimes after the collapse of the communist regimes;
- the need to survive under the conditions of sudden de-industrialization.

Replacing tractors by horses was one example of incoherence and political incapacity to cope with the global trend of acceleration of economic development. Is this a case of technological retrogression, or modernization reversal, or both (Endresen 1987; Blumer 1990; Endresen 1994; Reinert 2011)? Was this kind of de-technologization of the economy a necessary action so as to build another, more competitive one? It is obvious that technological retrogression cannot be assimilated with a creative destruction, but rather with a destructive creation, with elements of dystopia encouraged by a return to more primitive technologies.³⁰

The post-communist evolution of the socialist countries indicates that de-industrialization could just as well have been conducted by way of a gradual modernization, by capitalizing on the less demanding markets, and agriculture could have continued its market-oriented development, even in the heavily centralized countries such as Romania. In that country, for a decade, the dominant characteristic of agriculture was its focus on subsistence, as the restitution of land to the villagers led to an excessive fragmentation of the land unaccompanied by adequate financial and economic policies of credit and modernization. Perez (2004, 233) remarks that 'the social consequences of each transition are vast and profound'. As described in the previous section on technological retrogression transitions may also produce technological retrogression. This idea applies well to many former socialist countries after the collapse of the Soviet Union, which saw the return to manual labour in farming, the use of animals and rudimentary farming techniques. This explains the low yields and the high cost of agricultural produce on the individual farms.

In most of Europe industrialization slowly replaced feudalism, a system that – even in the eastern parts of Germany – prevailed into the twentieth century. What we are seeing in the EU periphery, such as Romania, at the moment is a return to a system which closely resembles feudalism. People with available capital buy up houses and allow unemployed workers to live there without paying rent, under the condition that they work free for the landlord whenever he needs their services. Although there is a certain logic in the fact that the death of industrialism again opens up for the system which preceded it, this is a truly dystopian development which ought to attract our scholarly and political attention.

The possibility of a different path is demonstrated by the example of a local community, Curtici, in Arad county (Western Romania). This was an obvious case of the power of persuasion of the leader, who, although a former collective farm president (personally decorated by Ceauşescu himself on numerous occasions), managed to avoid the collapse that had occurred nationwide and to transform the former collective farm into a very efficient enterprise. This virtuous example sees the creation of a genuine agro-industrial holding with high crop yields, a strong livestock division, a food industry unit that capitalizes on the produce obtained, and a chain of 34 stores all across the region (see www.caicurtici.ro). Most of the owners of the land are employed in agriculture and they benefit from each year's profits. Therefore, what had seemed a utopia on a micro scale in the early 1990s has become reality under the conditions of participative and adaptive management.

³⁰ See Reinert and Kattel (2004) for a critical appraisal of the negative consequences of the EU enlargement that took place in that same year. Reinert and Kattel (2007) elaborates on the same point.

Table 40.1 Decreasing livestock in Romania between 1990 and 2012

	1990	2012	Dynamics rate (2012/1990) %
Cattle	5 381	2 003	37.2
Pigs	12 000	5 227	43.6
Sheep	14 061	8 822	62.7
Poultry	121 379	80 119	66.0

Source: Authors, processed data, using the Romanian statistical yearbooks 1991 and 2013.

This is the modern version of a strategy that had been planned in Walachia about 180 years before (1835–1836): the Scăeni Phalanstery (Berindei 1991). Known as the second ever attempt, anywhere in the world, to implement Charles Fourier's utopian ideas, it came to an end before it could become functional. By contrast, today the island of prosperity in Curtici, generated by the implementation of development grounded in trust, social fairness and a combination of private and collective initiative, demonstrates the conditions under which Romanian agriculture could have avoided the collapse from which it has yet to recover.

The agricultural village was the major loser of the economic transformations in Central and Eastern Europe. Its only chance for survival was in agriculture, and here technological retrogression in agriculture is extremely visible across the landscape and measurable, by means of the decline of agricultural output at national level (especially industrial crops), the shrinking numbers of livestock (Table 40.1) and the breakdown of the domestic food and textile industries.

The collapse of the Soviet Union would almost qualify as a dystopia in itself. We could call it 'the dystopia of too victorious warfare'. As warned by Keynes after World War I (Keynes 1919), the harsh conditions under which Germany had to live after the war could lead to a new war within a generation. The massive destruction of Russia's productive capacity following the 'shock therapy' advised by the West may have a similar effect today. In the aftermath of WWI the problems arose with ethnic Germans in neighboring countries. The parallel with the present problem of ethnic Russians outside Russia is striking.

THE DYSTOPIA OF ECONOMICS AS 'BAD SCIENCE'

Ricardo, and still more those who popularised him, may stand as an example for all time of the extreme danger which may arise from the unscientific use of hypothesis and social speculations, from the failure to appreciate the limited application to actual affairs of highly artificial and arbitrary analysis. (Herbert Foxwell, Cambridge economist; Foxwell 1899, p. xli)

A gang of Aleutian Islanders slashing about in the wrack and surf with rakes and magical incantations for the capture of shell-fish are held, in point of taxonomic reality, to be engaged in a feat of hedonistic equilibration in rent, wages, and interest. (Thorstein Veblen, US economist; Veblen 1919, 193)

From the two quotations above we can appreciate different ways of addressing an economic theory whose level of abstraction has brought economics to a point of irrelevance. Unfortunately the theory fitted the vested interests of some groups, in particular the financial sector, over and above those of the productive sector; and the wealthy nations over and above the poor. Both quotations above are from the last time Ricardian economics was declared dead, a process which started with the economic crises of 1848, peaking early in the twentieth century. Herbert Foxwell sincerely tried to point out the extreme dangers of such theories; while Thorstein Veblen, attempting to do the same thing, used a heavy dose of irony in order to get the point across.

Today we are again facing the same problem, a rebirth of mainstream economics at an excessively high level of abstraction. ‘Irrelevance as methodology’, as Wolfgang Drechsler – a contributor to this volume – once quipped. One starting point for the return of irrelevance may be said to have been Milton Friedman’s assertion that: ‘Truly important and significant hypotheses will be found to have “assumptions” that are wildly inaccurate descriptive representations of reality, and, in general, the more significant the theory, the more unrealistic the assumptions (in this sense)’ (Friedman 1953, 14).

Asserting this adverse relationship between realism and scientific merit – ‘the more scientific the theory, the more unrealistic the assumptions’ – was not met with a logical question by economists of the past; and surely Thorsten Veblen (1857–1929) would have posed: ‘In whose vested interests is this theoretical development?’ English economist Josiah Tucker (1713–1799) was also in the habit of asking ‘*Cui bono?*’ – who will profit from this? (Tucker 1782). An economic theory no longer distinguishing between the financial sector and the real economy would, in the old understanding, benefit the financial sector. A Ricardian economic theory modelling international trade as the barter of qualitatively identical labour hours – equating the labour hours in Silicon Valley with those of a hunting and gathering tribe in the Amazon – will not see that ‘free trade’ may benefit some types of economic activities and some nations more than others.

If economics is indeed a science, albeit a science whose state of health offers reasons for concern, and if science itself experiences a moment of crisis, as we are about to discuss, what are we to make of the joint occurrence of these problems?

One conference entitled ‘What’s Wrong with the Economy – and with Economics?’;³¹ another conference on ‘Research Integrity’;³² Queen Elizabeth II questioning the predictive capacity of British economists at the London School of Economics (Pierce 2008); the cover of the weekly magazine *The Economist* (2013) devoted to ‘Bad Science’; these are all convenient icons to illustrate the elementary consideration that both economics as a discipline, and science in its totality, including natural and social sciences, are in crisis.

These twin crises have so far been the subject of separate strands of reflections, both in the academic literature and in investigative journalism. We are interested in the following questions:

³¹ <http://www.nybooks.com/blogs/gallery/2015/mar/29/whats-wrong-with-the-economy/>.

³² <http://www.wcri2015.org/>.

1. Are these two crises one?
2. If this is the case, is there something which economics can learn from the diagnoses and solutions advanced from the craft of science and technology studies (STS)?

Is the Crisis One?

It has been written elsewhere in this volume and in a rich literature, which has in Philip Mirowski its latest champion, that economics is a recurring victim of its physics envy (Mirowski 1991). There is at present an interesting debate on ‘mathiness’, a new term coined by economist Paul Romer (2015) to lead a courageous debate against ‘freshwater economists’ or ‘sympathizers’ for their use of mathematics as ‘Latin’, in the sense that mathiness is used to scare off debate and veil ideological stances. In a later blog Romer bases his plea to fellow economists for the importance of intellectual honesty on a famous speech by Richard Feynman, perhaps the most loved US physicist ever. The speech, entitled ‘Cargo cult science’, famously argued for a distinctive feature of science: that of being falsifiable; and for the moral commitment of scientists to go out of their way to try to falsify their own work. Hence in the moment in which economics performs its ethical self-examination it again turns to physics.

The moment of truth for economics has coincided with the debacle of mathematical modelling – in the form of dynamic stochastic general equilibrium (DSGE) models – failing to forewarn of the oncoming crisis, with the ensuing inquiries involving the US Senate as well as the British Crown (Mirowski 2013, 275–286). The use of mathematics to obfuscate rather than illuminate is a recurring theme in this volume, and corresponds to the ‘Latin’ of decaying science for Harold Innis;³³ see Reinert (2012a) and Saltelli et al. (2013).

While economics goes through a needed moment of reflexivity, sciences in general – including natural sciences – are in the midst of their own unprecedented existential crisis. This crisis is so deep that even the media have taken note. As mentioned, *The Economist* devoted its cover to ‘Bad Science’ in 2013. Journals such as *Nature* (2015) and *The Lancet* (2015) have run concerned editorials, and four international conferences have already been held on scientific integrity between 2007 and 2015 (*Lancet* 2015). The issue is debated in academia and think tanks (Horton 2015). In social science a recent important experiment run on 100 major studies could replicate only 35 per cent of the total, and the size of the effects was systematically smaller in the replicate than in the original (OSC 2015).

The crisis had long been anticipated by Derek de Solla Price (1963), for whom science would reach saturation (and in the worst case, senility) under its own weight, victim of its rapid exponential growth (pp. 1–32). For Jerome R. Ravetz (1971) industrialized science would have systematic and serious problems with its quality control mechanism due to its mutated ethos and to mutated scientists’ norms.

How does this crisis of science impact on science’s use to inform policy, and what has this to do with economics? As is known, economics is presently a master discipline as far as policy advice is concerned. Almost by definition, cost–benefit analyses, contended by engineers and economists (Porter 1995), are the tool of choice to adjudicate the feasibility of policy options. In the academic world, economists command the highest salaries

³³ For a discussion of Harold Innis’s contribution, see the Introduction to this volume.

(Fourcade et al. 2014), decide upon the desirability of austerity policies – even when based on flawed spreadsheet software modelling (Cassidy 2013) – and tend to extend their reach to adjudicate upon disputes such as on climate change (Stern 2015).

Scholars of the field of science and technology studies (STS) as well as some fathers of the ecologist movement (Lewis Mumford, Langdon Winner) have long argued that the enrolment of science in support of policy – in the form of risk or cost–benefit analysis – but also in the dream of innovation as a source of never-ending growth has brought about as many new problems as those which were solved. A vivid example is the present debate between techno-optimists (Rifkin 2014) and pessimists (Brynjolfsson and McAfee 2014; see also Pope Francis's 2015 encyclical letter *Laudato Si*) on the effect of automatization on the labour market. Regarding the role of economics, Ravetz (1994) advances the provocative hypothesis that economics has remained after all a folk science, meaning by this a science that never quite mastered the production of stable 'facts'.

Can Something be Learned from Science and Technology Studies (STS)?

A prophetic book on the wonders of science, Bacon's *Novum Organum*, was published in 1620 (Bacon 1994 [1620]). In the centuries that followed, both Descartes and later Condorcet enriched this vision, but at the same time lost Bacon's solid empirical roots. For some scholars the last four centuries have then been those of scientific hubris, or rationality becoming a substitute for reason; to use the words of a famous book of Stephen Toulmin, of a 'Cartesian dream' (Guimarães Pereira and Funtowicz 2015). Could it be that economists have their own version of the dream? Would it be far-fetched to call it the Ricardian dream? These dreams have a common origin, and mathematics and reductionism are the inner thread.

If the two dreams have a common root, is it possible that some of the recipes advocated by STS scholars for sciences in general may have a bearing on economics as such? One recipe has already been identified as crucial by both communities: this is the need for something to be unlearned before progress can be achieved. Paul Romer (2015), the authors of this volume, and STS scholars would probably agree that one should abandon the belief that nothing can go wrong when there are quantitative data and mathematical techniques (Ravetz and Saltelli 2015). Next comes the Cartesian hubris to understand and control systems involving complexity and consciousness, such as the economy, with reductionist reliance on the precision of models and indicators.

A second lesson would possibly derive from the remark that the most critical voices in science – and the most perceptive of the oncoming crisis – were from the field of history or philosophy of science, or STS. Likewise the most critical voices in the criticism of economics also come from historians of economic thought (e.g., Reinert, Chapter 1 and Reinert and Rössner, Chapter 3 in this volume; Mirowski 1991). The second lesson would, hence, be to listen to the voices from these disciplines.

Another recipe coming from STS which could perhaps be considered in economics is for the strengthening of quality control mechanisms and tools. This would involve a better method to reintroduce craft skills in handling numbers. Education would play an important role in this, as well as better strategies for the screening of mathematical evidence. These include tools such as NUSAP (Funtowicz and Ravetz 1990; van der Sluijs

et al. 2005), sensitivity auditing (Saltelli et al. 2013), and quantitative storytelling (Saltelli and Giampietro 2016).

Daniel Sarewitz (2015), a long-term advocate against science's 'excess of objectivity', has demonstrated the importance of citizens' participation if the applications of science to policy are to work. Even if citizens become more like scientists, this would again be the old ineffective 'deficit model' whereby progress is hampered by citizens' lack of scientific (or economic, in this case) numeracy. Change has to come from within the professions as well. There are already precedents, in the activist campaigns such as those organized by Sir Timothy Gowers against Elsevier, or the action of individual economists such as Paul Romer, already mentioned.

Along these lines one might think of a utopia where the movement known as 'citizen science' develops and extends into the arts and professions, to create aware citizen-scientists and citizen-economists. The profession has the intellectual ammunition to achieve this: just listen at the talks given at the conference 'What's Wrong with the Economy – and with Economics?' mentioned at the beginning of this section. We live by the choices we make. We may become the artifices of our own misery if we keep living in the shadows of Keynes's famous 'defunct economists' or, as argued in the present volume, if we restrict arbitrarily the number of economists whose dreams we choose in order to understand the world around us.

A FAILED UNDERSTANDING OF UTOPIA RESULTING FROM THE LACK OF CONTEXT: FERGUSSON'S (2011B) 'KILLER APPS', AND ACEMOGLU AND ROBINSON (2012)

Harvard economic historian David Landes (1924–2013) made a rough but insightful taxonomy of explanations of economic development. Starting out his Richard Ely Lecture³⁴ entitled 'Why Are We so Rich and They so Poor?', Landes says:

I shall argue that most answers to the question posed by my title fall into one of two lines of explanation. One says that we are so rich and they so poor because we are so good and they so bad; that is, we are hardworking, knowledgeable, educated, well-governed, efficacious, and productive, and they are the reverse. The other says that we are so rich and they so poor because we are so bad and they so good: we are greedy, ruthless, exploitative, aggressive, while they are weak, innocent, virtuous, abused, and vulnerable. It is not clear to me that one line of argument necessarily precludes the other, although most observers and commentators have a strong preference in the matter. (Landes 1990)

What Niall Fergusson's (2011b) bestseller *Civilization: The Six Ways the West Beat the Rest* with its historical 'killer applications' to wealth has in common with Acemoglu and Robinson's (2012) *Why Nations Fail*³⁵ is that their bias makes them fall too heavily into Landes's first category; a bias that refuses to acknowledge that, to a large extent, the dynamics that leads to economic development (what we have called the Marshall Plan

³⁴ Named after Harvard economist Richard Ely (1854–1943), a founder and the first Secretary of the American Economic Association, often referred to as a 'Christian Socialist'.

³⁵ See also a brief discussion in Chapter 1 of this volume.

mechanisms) has been the result of a certain type of economic-political structure that was prohibited under colonialism. We shall argue that the urban bias³⁶ that created the *ben commune* (Brunetto Latini, 1220–1294), freeing Europe from the extractive modes of feudal society, could not have happened without a large division of labour in handicraft and manufacturing. Here lie the origins of inclusive political institutions. ‘City air makes free’, runs an old German proverb, reflecting the legal practice that after a period of a little more than a year in a city, serfs were no longer the property of the landowners.³⁷ If, in the absence of manufacturing, colonial peasants and colonial societies were not able to produce the economic structures upon which Acemoglu and Robinson’s ‘inclusive institutions’ rest, these authors’ approach could be seen as a variation, although more sophisticated, of Landes’s ‘we are so good and they so bad’.

In a sense both works represent a lack of understanding of the qualitative historical dynamics, how things evolve into what they are: the static point of departure for modern regression analyses. Alfred Marshall, the founder of neoclassical economics, respectful of the important roots of economics in German economic tradition, puts it this way: ‘in other words that from what *is* we have to learn what is *becoming*; from *das Sein* we have to learn *das Werden*’ (Marshall 1897, 10).

Acemoglu and Robinson fail to explore the *werden* (the ‘becoming’) of the inclusive economic institutions upon which they put so much emphasis. If we allow US economic historian Richard Goldthwaite, an expert on the early Italian capitalist city states, to be our guide to the history of capitalism, this history starts with the conscious shift of comparative advantage in the Italian city-states. What is generally seen as Europe’s ‘commercial revolution’, Goldthwaite argues, was in fact a process of import substitution: from the twelfth century onwards manufactured goods, which had previously been imported from the Levant, started to be produced in Europe (Goldthwaite 2009, 6–8). As Sombart and Schumpeter would argue, economic strategies tend to produce outcomes that were in no way intended; for example, the intention of early English industrialists was probably to join the landed oligarchy, but the forces set in motion broke down the very structure they planned to join. The intention of the then relatively backward European continent was not to construct capitalism and inclusive institutions; yet, in the end, that was the outcome of those strategies.

Part of the problem with modern literature on economic development is the crucial issue of the arrows of causality between economic activities and the institutions with which they co-evolve.³⁸ Inhibiting certain kinds of economic activities will also impede the development of institutions with which they co-evolve. In a brief moment of counterfactual history we can imagine how the United States would have looked – with slavery, free trade and no pro-industrialization policies – if the South had won the Civil War. Such a society would hardly have displayed the desired ‘inclusive institutions’. Acemoglu and Robinson as well as Fergusson leave out of their analysis the wisdom of centuries, starting, in the English-speaking literature, with Francis Bacon’s (1994 [1620]) *Novum*

³⁶ For a discussion of the role of the cities, in addition to the work of Jane Jacobs (1984) cited in the Introduction to this volume, see Sir Peter Hall’s massive tome *Cities in Civilization* (1998). On the appearance of the town and city economies in the larger picture of the development of human societies, see Reinert (2000).

³⁷ ‘Stadtluft macht frei’; see Grimm and Grimm (1991 [1919]). See also Hühns and Hühns (1963, 123).

³⁸ For a more thorough discussion see Reinert (2006b).

Organum: ‘There is a startling difference between the life of men in the most civilized province of Europe, and in the wildest and most barbarous districts of New India. This difference comes not from the soil, not from climate, not from race, but from the arts.’

As mentioned in Chapter 1 of this volume, we find this understanding of how the arrows of causality run – from the occupations of man to his institutions, not the other way round – in the Arab-speaking world with Ibn-Khaldun (1332–1406): ‘The differences between different peoples arise out of the differences in their occupations’ (Ibn Khaldun quoted in Issawi 1987, p. 17). The direction of the arrow of causality in development still remains that described by Johann Jacob Meyen in 1770: ‘It is known that primitive nations do not improve their customs and habits, later to find useful industries, but the other way around’ (quoted in Reinert 2007, 101). The change of mentality occurs with the change of mode of production. Waiting for a hunting and gathering society to acquire the institutions of industrial societies, and then to industrialize, is absurd.³⁹ Even when societies are much closer in terms of development this institutional reversal of the arrow of causality may prove elusive, as was the attempt to impose the US-style rule of law on occupied Iraq (Carothers 2009).

In his bestseller, *Civilization: The Six Ways the West Beat the Rest*, economic historian Niall Fergusson (2011b) introduced a set of six ‘killer apps’: six ways in which Western civilization had beaten the rest of the world. It is not difficult to agree with most of Fergusson’s ideas, but we challenge them in this Epilogue with an antagonist list of recipes, one proposed by Erik Reinert⁴⁰ which tries to identify deeper reasons and factors behind Fergusson’s own list of ‘killer apps’.

We start with Fergusson’s ‘killer applications’:

1. Competition. Fergusson compares China to Europe in 1500. He argues that the Chinese Empire remained under an isolationist regime, leading to little competition among polities. Europe, long fragmented, encouraged competition and this led to increased travel to seek meaningful opportunities abroad.
2. Scientific revolution. Fergusson claims that breakthroughs in science are mostly attributed to European innovations, particularly in weaponry which allowed military predominance.
3. Property rights. Fergusson believes that a firm grounding in respect for democracy and property ownership led to successful economic growth with a government mindful of these ideals.
4. Modern medicine. The West found vaccinations for smallpox and yellow fever and doubled life expectancy. Many of these vaccinations were disseminated in the colonies, and were seen as important matters of public health.
5. Consumer society. In the eighteenth and nineteenth centuries, Britain was a keen example of an all-encompassing spending society, whose ideas spread to the colonies, engendering a sweeping popularity of Western clothing.
6. Work ethic. Fergusson directly attributes hard work to the rise of Protestantism, which stressed hard work, saving and reading.

³⁹ This is also discussed in Reinert (2007, 221–223).

⁴⁰ Fergusson’s entry in Wikipedia https://en.wikipedia.org/wiki/Niall_Ferguson (accessed November 2015) shows the controversies surrounding Fergusson’s revisionist view of colonialism.

RENAISSANCE AND ENLIGHTENMENT: AN ALTERNATIVE SET OF THE 'KILLER APPS' OF THE WEST

'Institutions' has been the shield behind which the economic historians siding with neoclassical economics found a temporary safe haven. By focusing on institutions per se, rather than on the contexts and conditions that brought about these institutions, it has been possible to disregard the most blatant fallacy of neoclassical economics, David Ricardo's trade theory, and the myth that free trade has ever brought a nation out of poverty.

If we take the time and effort to dig behind the institutional shield, we find that civilization, from Ancient China to the Arab civilization in Baghdad around the year 800, has been based on what we could call 'knowledge for the sake of knowledge'. Thorstein Veblen referred to this not-for-profit quest for knowledge as 'idle curiosity'.⁴¹ From the Renaissance⁴² on, Christendom⁴³ came with a 'duty to invent' (see Reinert and Daastøl 1997); we could call it the 'da Vinci gene'. These factors would place the root of success of the West in its history and philosophy, in its attitude to new knowledge, from the Eleatic school introducing abstract thought to the long tradition of preserving classic traditions in manuscripts and books in the monasteries of Christianity. The change in the meaning and connotations of innovation from when Roger Bacon (c.1214–c.1292) was arrested in Oxford for 'suspicious innovations' (that is, seeking knowledge outside the Bible and Aristotle) to when Francis Bacon (1561–1626) published *An Essay on Innovations*, where innovation drives progress, testifies to the mind shift on which Western civilization was built.⁴⁴ This leads us to the following list of root causes – of 'killer apps' – of progress:

1. *Knowledge for the sake of knowledge.* Reinert and Daastøl (1997) argues that the Renaissance – and with it Western economic take-off – was founded on a religiously based *duty to invent*, which we could call the *da Vinci gene*. In Thorstein Veblen's terminology this corresponds to *idle curiosity*. i.e. not-for-profit-curiosity (see Reinert and Viano 2012).
2. *'Magna facere' and emulation.* That production did not stop when the family's needs were met is a key element distinguishing capitalism from other economic systems (Werner Sombart). Upon this necessary building block came the taming of warfare into more peaceful rivalry. One early example of this is the curious competition between Bologna families of the twelfth century onwards in building towers – deemed fairly useless for other purposes than conspicuous consumption – rather than competing in plain war (Roversi 1989). The duty of Magnificent Princes (from *magna facere*, to make great things) was to sponsor great art and architecture. Albert Hirschman's (1977) *The Passions and the Interests* presents capitalism as a remedy against the passions of wars in favour of the 'harmless' interests of commercial life.

⁴¹ For discussions of Veblen's terms used here see Reinert and Viano (2012).

⁴² A modern introduction to the Renaissance by Harvard historian Stephen Greenblatt is *The Swerve: How the Renaissance Began*, London: Bodley Head, 2011.

⁴³ We are not claiming that this is a monopoly of Christendom; during the Dark Ages of European civilization Islam (in particular in Baghdad around the year 800) and the Jewish religion were important keepers of Greek wisdom.

⁴⁴ See Reinert and Daastøl (1997) for a further discussion.

Trade has to be understood as war by other means in a game of emulation between states (also in war and luxury).⁴⁵ This became another key Western feature.

3. *Virtue and instinct of workmanship.* Capitalism required three fictitious commodities: ownership of land, labour as a commodity, and money (Karl Polanyi, 1886–1964). Civilizing this system required ‘virtue’, a specific ethos, where the values of Greek philosophy merge with the values of the New Testament (in partial contrast to the Old Testament). This virtue created the *ben commune*, the common weal, in urban life, and made development a phenomenon that could not exist independent of cities. This *ben commune* was paramount in the Italian Renaissance, with Florence’s poet and politician Brunetto Latini (c.1210–1294), and continuing with Leon Battista Alberti (1404–1472)⁴⁶ and beyond. This ethos was later popularized by Benjamin Franklin, whose influence in the West can be measured by the fact that his *Way to Wealth* is the economics work that has reached the largest number of editions of all.⁴⁷ The ‘taming of predatory instincts’ – lining up the vested interests of individuals with the vested interest of society at large – was an eighteenth-century exercise set in motion based on the provocation of Bernard Mandeville’s (1723) *Fable of the Bees*. Taming what in Thorstein Veblen’s terminology are called ‘predatory instincts’ can be seen as the victory of cooperative over extractive political institutions.⁴⁸ Thus a necessary foundation for capitalism and the rule of law was the aligning of the vested interests of the individual with the interests of society at large. Double-entry bookkeeping was a product of the Italian Renaissance and was a precondition for capitalism: for capitalists to quantify their net worth, to manage their capital, but also for society to make fair taxation possible. Modern banking saw Genova, Siena, Florence and Venice as leaders, while double-entry bookkeeping (*partita doppia*) was formalized by Luca Pacioli (1445–1517), who had been under the early influence of Leon Battista Alberti (see above).⁴⁹
4. *Individualism balanced with an understanding of a ‘ben commune’* (Veblen’s ‘parental bent’). In contrast to feudalism, where money was made by clinging to inherited property rights, the Renaissance and the Enlightenment created a Schumpeterian dynamic where the only way to continue to make money was to innovate. This dynamic was well captured by the Red Queen’s line, ‘Now, here, you see, it takes all the running you can do, to keep in the same place’, in Lewis Carroll’s (1991 [1871]) *Through the Looking Glass*. That frequent financial crises killed idle capital – *mammon* – and poorly invested capital was probably an important ingredient in the system. Schumpeter was a lone voice in arguing that financial crises are necessary ‘cold showers’ that cleanse the capitalist system, but he was probably right. By saving the financial sector we seem today to have killed the powers of creative destruction

⁴⁵ Building on Fergusson’s point on the role of war can be added a work by Werner Sombart (1913a), *Krieg und Kapitalismus* (War and capitalism). In the same year, however, Sombart identified another main driver for Western capitalism, in *Luxus und Kapitalismus* (1913b). The first volume has never been translated into English, the second was translated as *Luxury and Capitalism*.

⁴⁶ For a discussion of the role of Leon Battista Alberti, see Chapter 1 in this volume.

⁴⁷ <http://waytowealth.org/>.

⁴⁸ Thorstein Veblen, who would have added to their perspective, is not mentioned in Acemoglu and Robinson.

⁴⁹ Recent works on bookkeeping include Gleeson-White (2012) and Soll (2014).

in the real economy in favour of negative-sum games – or even destructive creation – based on innovations in the financial sector.

5. *Huge diversity of states and approaches*, balance of countervailing powers, and freedom from arbitrary power. This feature is common to ancient and modern thinkers alike, from Montesquieu to John Kenneth Galbraith. To take an example, in Florence the composition of *la signoria* was conceived as to never have more than one banker; see John Najemy's discussion of the anti-magnate legislation in Florence (Najemy 2006). At the same time the elected rulers – the *signoria* – had terms as short as three months. Likewise Venice's institutions to prevent encroachment of power elites included anti-corruption policies, the 'circulation of elites' and of public offices – the normal tenure was only six months – and the person elected *Doge* was one not seeking power. Rather, the *Doge* was often a successful businessman who had to give up his business during his term, and remain virtually a prisoner in the city.
6. *Anti-feudal and pro-manufacturing policies* in the past gave rise to increasing returns and a large division of labour which made the growth of cities and generalized welfare possible. Giovanni Botero (Chapter 1 in this volume) was an important early theorist here. The rise of capitalism represents the victory of individual freedom, coupled with an intense urge for a *ben commune* which is present in urban societies but not in feudal ones. These urban values represented anti-speculation, anti-hoarding and anti-feudalism. Democracy in Florence was for centuries under threat from surrounding feudal landowners, and speculation was kept at bay by prohibiting the transport of food out of the city. Spain's 1520–1521 'War of the Comuneros' may be seen as an example of the urban, anti-feudal, political factions losing this type of conflict (Seaver 1866 [1928]; Gutiérrez Nieto 1973).

A main contrast, then, between Fergusson's and Acemoglu and Robinson's theses – which we here group together – and Reinert's thesis is that the former tend to disregard the context in which institutions develop. Inclusive economic institutions grew out of the freedom from arbitrary power that dominated feudal societies, and the way out required 'a cult of manufacturing'.⁵⁰ The most evident benefit springing from this freedom was the handicraft and manufacturing industries from which the cities could pay their food bills to the largely feudally controlled countryside. In Switzerland – together with Iceland and Norway, the only countries in Europe that were never controlled by feudalism⁵¹ – the Constitution to this day holds the absence of arbitrariness, of *Willkür*, as one of its most important principles (Uhlmann 2005). The state – never the individuals – may make 'arbitrary' decisions, but strictly if needed for the common good (*salus rei publicae*).

We would argue that historically the preconditions for the 'good governance', creating the 'inclusive economic institutions' which are seen as so central to Acemoglu and Robinson, are specific to those countries that historically have been through the anti-

⁵⁰ That this 'cult of manufacturing' in term had a very positive impact on agriculture was already emphasized by David Hume when discussing the reign of Henry VII (who started promoting manufacturing in England in 1485): 'Promoting husbandry . . . is never more effectually encouraged than by the encrease [*sic*] of manufactures' (Hume 1767, 65).

⁵¹ Norwegian historian Kaare Lunden has made the point that the three countries where feudalism never penetrated are also the countries that chose not to join the European Union.

feudal, anti-arbitrary process of industrialization. Poor countries have rarely been able to distribute the windfall profits from large findings of oil and gas. Norway managed this fairly successfully because the necessary inclusive institutions were already in place through industrialization and through a gradual political consensus.

THE OUTLINES OF A SOLUTION: FROM THE RENAISSANCE TO KEYNES (1933)

It often happens that the universal beliefs of one age of mankind – a belief from which no one was, nor without an extraordinary effort of genius and courage could at the time be free – becomes to a subsequent age so palpable an absurdity, that the only difficulty then is to imagine how such a thing can ever have appeared credible . . . It looks like one of the crude fancies of childhood, instantly corrected by a word from any grown person. (John Stuart Mill, *Principles of Economics*, 1929 [1848], 3)

Gestalt-Switch Moments: Learning from 1848 and 1989

From natural to social sciences, from fashions to zeitgeists, paradigm shifts of unexpected magnitude can take place over the shortest of times, as from the above quote of philosopher John Stuart Mill (1806–1873).

One of the more perverse ideological fabrications over the last decades has been the vilification of John Maynard Keynes (1883–1946) as a leftist monster opposing Friedrich Hayek (1899–1992) as our new ‘saviour’.⁵² The extremes to which the libertarian propaganda machine goes in demonizing Keynes – correctly seen by his biographer as ‘the economist as saviour’ (Skidelsky 1995) – is well represented by Libertopolis in Guatemala, which features a poster reading, ‘After the cult of Ché [Guevara] the cult of Keynes is the most harmful: That for ALL populists the GOD of economists is Keynes IS NO COINCIDENCE!’,⁵³ thus putting Keynes on the ideological level of Ché Guevara.

Keynes is again important today because he understood both the basic underconsumption problem that is latent in capitalism, and the role of industry. Today’s problems call for a new zeitgeist – a gestalt-switch – and we can think of few better introductions to what ought to be the new zeitgeist for the West than Keynes’s seminal article, ‘National self-sufficiency’, written in 1933 (Keynes 1982 [1933]). Like today, 1933 was a time of rude awakening, and the situation requires a zeitgeist recognizing the need for de-globalization: that goods to a larger extent must be ‘home-spun’ and that finance also ought to have a more national character. This of course does not literally mean autarky or self-sufficiency, but it means returning to the extremely successful world model of development that ruled from 1945 until the mid-1970s: the vision that world prosperity requires that manufacturing industries and advanced service sectors are distributed to all nations.

Keynes’s 1933 article didactically takes the reader through the necessary change in zeitgeist which was embarked upon in 1933, and upon which the world now again needs

⁵² A google search of ‘Keynes vs. Hayek’ gives 250 000 hits (November 2015)

⁵³ Source: Libertopolis, Guatemala, available at <https://www.facebook.com/libertopoliscom/photos/a.157988340883664.40196.122086647807167/1132999443382544/>.

to embark. Keynes first takes us through the reasoning necessary to free the mind from a belief in free trade as a matter of ‘moral law’:

I was brought up, like most Englishmen, to respect free trade not only as an economic doctrine which a rational and instructed person could not doubt, but almost as a part of the moral law. I regarded ordinary departures from it as being at the same time an imbecility and an outrage. I thought England’s unshakable free trade convictions, maintained for nearly a hundred years, to be both the explanation before man and the justification before Heaven of her economic supremacy. As lately as 1923 I was writing that free trade was based on fundamental ‘truths’ which, stated with their due qualifications, no one can dispute who is capable of understanding the meaning of the words.

Keynes gives us compelling arguments for de-globalization, why globalization had gone too far: ideas ought to travel freely but goods, to a larger degree than hitherto, need to be homespun, and finance should be primarily national:

But experience is accumulating that remoteness between ownership and operation is an evil in the relations among men, likely or certain in the long run to set up strains and enmities which will bring to nought the financial calculation.

I sympathize, therefore, with those who would minimize, rather than with those who would maximize, economic entanglement among nations. Ideas, knowledge, science, hospitality, travel – these are the things which should of their nature be international. But let goods be homespun whenever it is reasonably and conveniently possible, and, above all, let finance be primarily national. Yet, at the same time, those who seek to disembarass a country of its entanglements should be very slow and wary. It should not be a matter of tearing up roots but of slowly training a plant to grow in a different direction.

For these strong reasons, therefore, I am inclined to the belief that, after the transition is accomplished, a greater measure of national self-sufficiency and economic isolation among countries than existed in 1914 may tend to serve the cause of peace, rather than otherwise. At any rate, the age of economic internationalism was not particularly successful in avoiding war; and if its friends retort, that the imperfection of its success never gave it a fair chance, it is reasonable to point out that a greater success is scarcely probable in the coming years.

Global free trade did not deliver on its promise of global peace, although this was once a key argument for free trade. Obviously today’s context is different than that of 1933, but our argument is that since the very same type of economic forces are at work today – although in a different context – the solution to the problem lies in the same recommendations that Keynes had. We suggest that this is the direction in which we need to move, but the recommendations should not be taken literally. We must keep in mind that the policies here outlined by Keynes – and not a religious belief in free trade – were the true foundations for the policies that produced unprecedentedly high economic growth in the world until the mid-1970s. European economic growth over the centuries has always been based on the principle of emulation rather than on that of free trade, suggesting that the history of economic thought in this aspect needs to be rewritten (S. Reinert 2011).

Keynes then turns to what we today would call environmental issues:

The same rule of self-destructive financial calculation governs every walk of life. We destroy the beauty of the countryside because the unappropriated splendors of nature have no economic value. We are capable of shutting off the sun and the stars because they do not pay a dividend. London is one of the richest cities in the history of civilization, but it cannot ‘afford’ the highest standards of achievement of which its own living citizens are capable, because they do not ‘pay’.

The decadent international but individualistic capitalism, in the hands of which we found ourselves after the war, is not a success. It is not intelligent, it is not beautiful, it is not just, it is not virtuous – and it doesn't deliver the goods. In short, we dislike it, and we are beginning to despise it. But when we wonder what to put in its place, we are extremely perplexed . . . We are – all of us, I expect – about to make many mistakes. No one can tell which of the new systems will prove itself best.

The road ahead is better defined now than in 1933, when a planned economy was one of the possibilities open to the world. However, as a starting point we still have to get rid of what Keynes called the 'bundle of obsolete habiliments one's mind drags round'. A key obsolete notion is that all economic activities should be seen as being qualitatively alike, as is implicit in Ricardian trade theory. Since economic activities in reality differ so widely in terms of their ability to create welfare – which this book attempts to explain – a strategy to maximize world real income and welfare requires very different policies than the present economic strategy that instead maximizes international trade.

A new course could therefore also be beneficial to the nations which at first glance may appear on the verge of abandoning their Colbertian economic order. Our thoughts go to China. It may initially sound illogical, but as wages and employment rates in many European countries and in the United States fall, it may in fact be in China's long-term interest to tolerate some protectionism in these countries. Protecting parts of the industrial system of the United States and Europe can be seen as safeguarding the future size of overseas markets, of future demand for Chinese goods. In terms of underconsumption we are all in the same boat.

The devastating effects of the present crises are a direct result of the loss of a whole theoretical tradition based on qualitative understanding of the economy; of economics as an *Erfahrungswissenschaft*, a science of experience, based on an understanding of history rather than on mathematics. In this continental European tradition, from Karl Marx on the left to Joseph Schumpeter on the right, financial crises are a normal feature of capitalism. Because this type of theory also carries with it an understanding of the role of technology, this continental European type of theory also explains uneven economic development. It is our hope that this kind of experience-based economic theory – in the tradition of which this book is written – will again become influential in Europe. It is our turn not to criticize, but to emulate China's investments in new technology and infrastructure.

We face a quintuple challenge: a financial crisis, an energy crisis, an environmental crisis, a crisis of unemployment, and the crisis caused by the migration of surplus population from nations which de-industrialized and/or were caught in wars produced partly by the externalizations of Western anguishes. There is also a serious crisis of unbalance between the core and peripheral countries of the European Union. Either the uncompetitive peripheral countries become at the receiving end of Colbertian economic policies – including a break-up of the euro – or a large number of the inhabitants of these countries will physically move to the core countries.

Capital must be channelled from financial speculation into the employment of underutilized human resources, to solve the energy and environmental crises. Polluting oil is just as unlikely to be mankind's last source of energy as horses were, but as the age of complete dependence on oil is approaching its end we face similar uncertainties as when the age of horse-drawn carriages was coming to an end. The 1890s saw prototypes of

both steam cars and electrical cars, but the solution came from an outsider, from Karl Friedrich Benz and the gasoline-powered car. Today we are facing similar technological uncertainties and therefore need to throw resources at many possible solutions. If inflation is a necessary part of quelling the dominance of the financial sector, so be it. The financial crisis of the 1970s, normally called the oil crisis, was also solved partly through inflation. But being in the hands of a financial sector which prefers deflation to inflation will block the solution from the 1970s.

Today's economic theory has lost key features of what built Western civilization, of both the Renaissance and the Enlightenment. The core of what we call the 'Other Canon' of economics lies in qualitative features of Renaissance societies that are not compatible with (not possible to include in) the excessively formal structures of today's mainstream economics.

The core of the Renaissance was über-Schumpeterian: the *magna facere* that created great innovations in art and in the production of everything from weaponry to irrigation canals was a way of thinking big that went far beyond profit-making. Having lost the societal dimension through a cult of methodological individualism is one of the main problems of mainstream economics.

Renaissance Florence also understood the need to prevent speculation. Transporting food out of the city was prohibited; this could feed speculation. Renaissance cities also managed to create what John Kenneth Galbraith dubbed a balance of countervailing power. The Florentine government – the *signoria* – consisted of nine members, representing different professions, and only one of them represented the financial sector. Renaissance cities also frequently rotated their elected administrators to prevent corruption, and Florence specifically cultivated its urban culture – of manufacturing and trading – by keeping the producers of raw materials, the big landowners, away from any political power. In the world of today we still see how the absence of a manufacturing sector is part of a pattern of undemocratic governments. A common element of failed states is the almost complete absence of a manufacturing sector (Reinert, Kattel and Amaizo 2011).

Two key features of the Enlightenment are also lost in today's economics: the ability to build classification systems, as Linnaeus did, and to understand the limits that need to be set for private greed. As we have argued throughout this volume, a key feature of mainstream economics is its inability to qualitatively distinguish between economic activities. The apparent accuracy of neoclassical economics is a direct result of its failure to make qualitative distinctions. We all understand that if all medical doctors of Paris are put in one country and all the people who wash the floors of Parisian hospitals in another, we get one rich country of medical doctors and one poor country of cleaning ladies. This commonsense proposition is unfathomable in Ricardian trade theory, because world trade is modelled as the bartering of labour hours, all assumed to be of the same quality. This was the English way of trying to convince the colonies to stay with their comparative advantage in being poor and ignorant. Now this same theory is boomeranging and making the West poorer, also by bringing in migration from colonies we failed to industrialize and countries we violently tried to jump-start to democracy. The chickens are coming home to roost.

With the coming of neoliberalism, the key Enlightenment debate on the limits of self-interest – a debate which lasted virtually through the whole of the eighteenth

century – was lost. The conclusion of the Enlightenment debate was boiled down to one sentence by Milanese economist Pietro Verri in 1771: ‘the private interest of each individual, when it coincides with the public interests, is always the safest guarantor of public happiness’ (Verri 1771, 3). In other words, greed is good as long as the end effect contributes to making the economic pie larger. With neoclassical economics the public interest – society – ceased to exist as a unit of analysis. This opened up for today’s view – inspired by Gordon Gekko – that all greed is good, even the present greed of the financial sector which creates huge private wealth while shrinking the real economy to the detriment of the public interest.

At its nucleus, mainstream economics describes Adam Smith’s savage who has learned to barter, not Schumpeter’s savage who has learned to innovate. Like new medicines which fail to get government approval, situated and context-dependent economic theories that may approach reality generally fail to reach policy level. Although more realistic theories exist, the world is mostly ruled by the crudest of economic models.

Now is the time to rediscover the eighteenth-century science of economic decline (Reinert 2015), which came into being when formerly immensely rich city-states – such as Florence, Venice and the Dutch Republic – were losing wealth and power to increasingly successful nation-states such as England and France. The present choice of the West is between declining like Venice, turning into a museum, or declining like the Dutch Republic, no longer the wealthiest, but being still wealthy. In order to achieve the latter goal, we must selectively de-globalize, bring back the principles of the Renaissance and the Enlightenment, and with it an economic understanding that entails all the key principles that made Europe unique in the first place: emulation of the most successful nations, and only then free trade. After all, free trade has ruled the world only in two very brief periods of human history: the late 1800s, and the late 1900s and early 2000s. In both periods the cult of free trade came to an end for the same reasons: not only did free trade as a goal rather than a tool create intolerable poverty in the world periphery, but it also started an economic decline at the very core of capitalism.

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